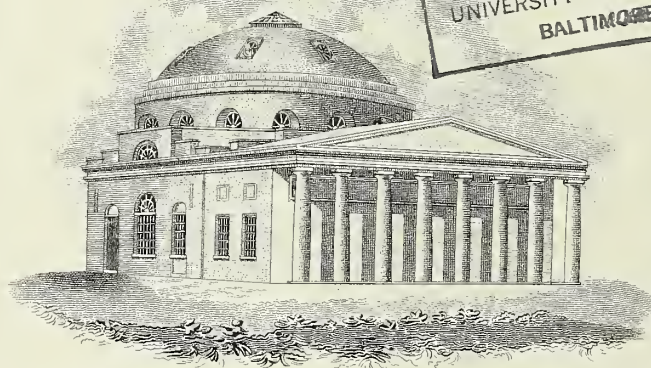


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THE ENDOCRINES IN GYNECOLOGY AND OBSTETRICS*

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BALTIMORE, MARYLAND

If I were asked to name the two most important present day questions in gynecology I believe that I should select the old but ever new problem of cancer and the fascinating and rapidly unfolding new chapter of gynecological endocrinology. The first of these has so long withstood all efforts at its solution that it seems now almost to be taken for granted. Although everyone appreciates the magnitude of the problem, it would almost seem that the clinicians in the front lines are fighting in rather desultory fashion with the inadequate weapons at hand, while anxiously awaiting the day when the investigators in the rear can supply them with more efficient means of combating the dreaded enemy.

There is small wonder that the problems of endocrinology, so much fresher, so much less depressing and so much more promising of immediate results, have captured the imagination of our profession, especially of its younger men. It is a virgin field from which choice nuggets have already been dug up by the early prospectors, with reason to believe that many others remain to be unearthed in the not very distant future. Many of the richer finds have been in the fields of reproductive physiology, and hence the fact that interest in endocrinology has been perhaps more highly developed among gynecologists than among those in any other field of clinical medicine.

The ideal approach to a discussion of gynecologic endocrinology would be the historical one, with a review of the steps by

which the present status of our knowledge has been reached. This, however, would be a rather long story, and it is not the one, I fancy, which a gathering of general practitioners would choose at the expense of a discussion of more practical immediate problems touching on their daily work. And yet I hope no one would be so materialistic as to expect me to offer a set of rules-of-thumb, as it were, for the management of cases of functional gynecologic disorder which we all see in such large numbers. It would be foolish, for example, to discuss the use of various hormone products except on the unwarranted assumption that everyone is fully familiar with what they represent, and what part the various hormones play in the normal cycle. As I have repeatedly urged, there is only one intelligent way to teach gynecologic organotherapy, and that is to teach gynecologic endocrinology.

It would seem, therefore, that the logical plan to follow would be to sketch briefly the hormonology of the female cycle, to point out, in the course of this brief review, how departures from the normal mechanism may produce certain well-known syndromes,

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and perhaps to touch upon the principles of treatment of these disorders. For a single short paper such a general discussion would seem more sensible and more time-saving than a categorical treatment of the various functional disorders encountered in gynecologic practice.

The concept of ovarian endocrine function which prevailed in the early years of the present century was very simple, predicated merely a single internal secretion which, in some way, was responsible for menstruation. With the discovery by Fraenkel of the endocrine activity of the corpus luteum, there were many who assumed that this structure was the sole source of the ovarian secretion. As a matter of fact, it was not until the discovery of the follicular hormone, by Allen and Doisy, in 1921, that we could separate the endocrine principle of the ovary rather sharply into two separate hormones, one produced by the growing follicle, the other by the corpus luteum. This new knowledge fitted in very smoothly with what had, in the meantime, been learned as to the histological sequence of events during the cycle.

Beginning just after a menstrual period, a considerable group of follicles begins to mature, and incidentally to produce increasing amounts of the follicle hormone, which, unfortunately, is known by various names; viz., estrin, theelin, folliculin, menformon, etc. Only one of this group of follicles, as a rule, reaches full maturity and ovulates, usually at about the mid-interval between periods. The other follicles are blighted at various phases through the process known as atresia folliculi.

After ovulation, the collapsed follicle begins a second or corpus luteum phase of development, rising like a phoenix from the ruins of the follicle and progressing to an acme which is reached probably a day or two before the onset of the next period. During its growth, it continues to secrete estrin, but in addition it produces a second and more characteristic corpus luteum hormone, known in this country, usually, as progesterone.

What effects are exerted by these two hormones upon the uterus? Estrin may be looked upon as a growth hormone possessing a highly selective effect upon genital mucous membranes. The endometrium, therefore, undergoes a steadily increasing

developmental advance from the end of one period to the beginning of the next. In addition, estrin has a less conspicuous developmental effect upon the musculature, and is apparently responsible for the normal rhythmic contractility of the latter.

Progesterone, on the other hand, becomes operative only after ovulation, and is responsible for the secretory activity of the gland epithelium which becomes increasingly apparent after the formation of the corpus luteum, and which is apparently essential to the implantation of the egg in the event of this having been fertilized. It likewise exerts an inhibitory effect upon the rhythmic contractility of the uterus.

This seems simple enough, but may mean more to the practitioner if the names of the two hormones are translated into terms of the commercial products with which he is accustomed to work. When estrin products are to be used for therapy, the physician will select such commercial products as theelin, amniotin or progynon B, to mention only the most popular preparations. When he wishes to use progesterone, he will employ such products as lipolutein or proluton, again mentioning those which seem most popular.

From what little has already been said, it is clear that no amount of estrin is in itself capable of producing in the uterus the same changes which characterize the normal cycle. Both ovarian hormones, acting in sequence, are essential for this. This obviously has a bearing on the treatment of amenorrhea. A second point which should be stressed is that when the ovarian hormones are used in the treatment of amenorrhea, their effect is purely substitutional, for it is well established that they have no stimulating effect on the ovaries; i.e., they are not capable of starting the ovarian machinery.

It is true that bleeding can be produced by the injection of large amounts of estrin alone, almost always in animals, and in at least some amenorrheic women. The explanation for this is the fact that the hormone builds up the endometrium and that, with the cessation of the treatment, the endocrine props are removed, with retrogressive changes and bleeding. The latter, in other words, is artificially induced, but it is, of course, not genuinely menstrual. Nor is there any reason to believe that it will recur

in periodic fashion, as might be expected if the ovaries were actually stimulated to activity. I have stated these facts without mentioning a few controversial points, but they represent the opinion of the most authoritative investigators.

The prenidatory function of the second ovarian hormone, progesterone, has been utilized in the treatment of habitual abortion, with considerable logic and apparently a fair measure of success. Again, progesterone therapy is an adjuvant in some cases of primary dysmenorrhea because of its inhibiting effect upon the contractility of the uterine muscle. An even more important and frequent application has been in the treatment of the troublesome disorder known as functional uterine bleeding, which next calls for brief discussion.

While ovulation occurs most often between the tenth and seventeenth days of the cycle, all sorts of vagaries may be noted. At times, indeed, ovulation does not occur at all, but the unruptured follicle undergoes dehiscence without the formation of a corpus luteum. Even so an apparently normal menstrual period may appear at about the right time, for the bleeding following withdrawal of the follicle hormone characteristically does not occur for a good many days. Women with such a non-ovulating or anovulatory cycle must, of necessity, be sterile, for they do not produce ova. While this is relatively infrequent, it does explain a certain proportion of otherwise unexplainable instances of sterility.

The occurrence or non-occurrence of ovulation in any cycle can be readily determined by securing for histologic examination portions of uterine mucosa shortly before the expected date of menstruation. This is almost always possible without anesthesia by means of one type or another of suction curette, such as the one I devised and described a year or two ago. If the examination of the endometrium shows definite secretory activity, it may be accepted that progesterone is being produced; *ergo*, that a corpus luteum is present in the ovary and that the patient has ovulated. If, on the other hand, there is a total absence of secretory activity, the woman has not ovulated.

Not only may the woman fail to ovulate, but the follicle may continue to grow and to produce estrin long beyond its normal

span, or, for that matter, a whole group of actively functioning follicles may thus persist. The endometrium is thus overstimulated with estrin, often assuming the pattern designated as hyperplasia of the endometrium. When the dehiscence of the persisting follicles begins, a free bleeding phase may occur, and this, in general, is the ovarian mechanism of so-called functional uterine bleeding, so common in women approaching middle life and in girls at puberty or in the adolescent phase, though not infrequent at any age during reproductive life. In such women corpora lutea are absent in the ovary, so that the use of progesterone has come into considerable vogue in the treatment of such disorders.

Before progesterone products were available, and even now, another form of treatment has been widely employed. I refer to the use of certain principles found in the urine of pregnant women, but I shall discuss this again later in this paper.

So far we have spoken only of ovarian hormones, but these are only links in a far-flung endocrine chain involving also other ductless glands than the gonads. The most important of these is the pituitary, which quite completely governs the endocrine activity of the ovary. A discussion of the function of this most important of endocrine glands, dominating not only the ovary but also the thyroid and the adrenal cortex, is a long story in itself, so that only one or two points relating to our present discussion can be mentioned. The domination of the pituitary over the ovary is dependent upon two sex hormones, one responsible for maturation of follicles and the motivation of estrin, the other responsible for luteinization and the motivation of progesterone. These two gonadotropic hormones are, therefore, spoken of as the follicle-ripening hormone and the luteinizing hormone. The best evidence now indicates that they are really separate hormones and do not merely represent different manifestations of the same principle, as some still believe.

So far it has not been possible to separate these two principles in any form satisfactory for clinical use, though efforts along this line are being made by several manufacturers, and preparations are available for at least tentative experimental purposes. If such preparations reach any degree of per-

fection or reliability, their use in certain menstrual disorders would be more logical than that of the ovarian hormones. For example, if a potent follicle-ripening gonadotropic principle were available, it might be of considerable value in cases of amenorrhea in which ovarian activity is in abeyance. In cases of functional bleeding, again, it is possible, though not certain, that the luteinizing principle of the pituitary gland, were it available, might be more effective than the organotherapy now at our disposal.

There is still another pair of hormone principles to be considered, in addition to the two ovarian and the two pituitary factors. With the occurrence of pregnancy, there is sudden increase in pituitary activity, with the appearance in the urine of certain principles which were formerly thought to be the overflowing pituitary sex hormones themselves. With a few exceptions, investigators now believe that while these pregnancy urine principles are very anterior pituitary-like in many respects, they differ from the real pituitary hormones in others, and that they are probably formed elsewhere than in the pituitary. This certainly seems to be true as regards the luteinizing element, which is apparently formed by living trophoblast at the implantation site.

Together the anterior pituitary-like pregnancy urine principles constitute the so-called prolan, upon the presence of which depends the efficacy of the various pregnancy tests. The follicle-ripening fraction is commonly spoken of as Prolan A, the luteinizing as Prolan B. It is the latter principle which, before the commercial advent of progesterone preparations, was first suggested by Novak and Hurd for the treatment of functional uterine bleeding. Without going into details, I still think it is often of great value, though failures are frequent enough with any form of organotherapy. My own experience with both the progesterone and the pregnancy urine preparations inclines me to believe that the latter

are more frequently effective than the progesterone. We know little as to the mechanism in either case, but there does seem to be some factor present in the urine of pregnancy which is of greater hemostatic value in functional bleeding than the use of the corpus luteum hormone itself. Again to bring home to the practitioner the commercial names with which he is probably more familiar than with the scientific terms, the pregnancy urine preparations are what he uses when he administers antuitrin S, follutein, or antophysin.

It is not possible, in a short paper, to discuss all the applications of endocrinology to gynecologic practice. The menopausal symptoms, when severe enough to demand treatment, are, in my experience, most often responsive to estrogenic therapy, usually in very moderate dosage, though always with recognition of the importance of other measures, such as reassurance, insistence upon the avoidance of worry, stress and anxiety, et cetera. The use of the estrogenic substances in the treatment of gonorrheal valvovaginitis of children is logical and usually highly effective. There are other conditions for which one form or another of ovarian therapy has been employed with a much less degree of rationale and much less satisfactory results.

From this very elementary and very sketchy résumé, I believe it must be apparent that the absolutely essential basis for organotherapy in gynecologic practice is, at least, a working knowledge of the endocrinology of the reproductive cycle. This is what I meant when I said that the way to teach organotherapy is to teach endocrinology. The elements of the latter are not difficult to acquire, and they not only give one a more rational viewpoint toward organotherapy, but also they are apt to make much more intelligent one's interpretation of many of the functional disorders presented by such a large fraction of our gynecologic patients.

26 E. PRESTON ST.

THE LIMITATIONS OF TRANSURETHRAL RESECTION OF THE PROSTATE GLAND*

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DETROIT, MICHIGAN

In discussing the "limitations" of resection of the prostate gland, we are constrained to approach the subject, not only from the standpoint of the *contra*-indications, but also to think in terms of all the associated factors which might have influence on the outcome of this most tricky and difficult of procedures.

There is no doubt that this operation has been gravely abused and, moreover, there is no doubt that too much has come to be expected of it. It has already come to be classed as an easy way out of a difficulty; easy for the patient, easy for the operator; for any operator. This is far from the truth. It may be relatively easy for the patient, but it is certainly hard on the operator, if he be a conscientious surgeon and, for once, a definite procedure has been lifted out of the hands of the general man into the field of the highly trained urologist, who has lived with his "eye in the bladder neck," who lives it and thinks it and is constantly in touch with it; for if ever a procedure needed the tactus eruditus by men temperamentally fitted to do it, this is it! Properly handled, it may eventually rob prostatic surgery of its high mortality rate in the hands of many incompetent operators and may tend to eradicate the present fear in the public mind, engendered by the widespread knowledge of the all too-frequent bungling of the past.

In 1911, one of the greatest operators and surgical thinkers of all time, John B. Deaver of Philadelphia, said, at a meeting in Baltimore, "Well, at best we expect a mortality of about 30 per cent in our prostatectomy cases." The answer to this is obvious. Great surgeon that he was, he fell into the common error of that day, of putting the prostate cases on, as the last operation of the morning, just before the staff went to lunch.

Our constant insistence that transurethral prostatic resection be limited to the type of bladder neck pathology, for which the operation is most suited, has created the impression, we fear, that we are largely opposed to this method, which is far from be-

ing the case. We certainly have no quarrel with the procedure. We were the first to use it in Detroit, and then only after months of careful study and practice on beef hearts, and we are now approaching the 600 mark and are doing about 75 per cent of bladder neck cases this way. So it is self-evident that, in our clinic, the operation is the one of choice, *whenever it fits the case*. But we do feel constantly that we can perform a better service by pointing out the dangers which lie in the use, and particularly in the misuse of these instruments, than by lauding to the skies an approach which gets sure results only when the instrument is guided by the adroit hand of an operator of great experience. Recognizing, therefore, the many pitfalls incident to this peculiar and most difficult procedure, we have in the past been inclined to be most conservative in our attack and have refrained from shouting from the housetops the capacity of this or of any other single method of operation to fit any and all conditions at the bladder neck.

In the field of biology, there is no single procedure which will give the true and lasting answer to all problems of pathological activity. Surgery is not so simple as that. *There is a vast difference between a true surgical approach and a mere operative attack*. We are not dealing in mass production. Each case is a law unto itself and requires the utmost skill in differential diagnosis and a very fine sense of evaluation of the bladder neck picture and associated pathology before determining the indicated method of approach.

The operation of transurethral resection, in one form or another, is as old as the hills. It was first attempted, in a crude way, just a little over one hundred years ago.

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The original efforts were all well intended, but they left out of account the question of hemorrhage, and the after-care was a rather horrifying experience. Even the cylindrical punch of Hugh Young was applicable only to fibrous median bars and the subsequent hemorrhage and generally unsatisfactory results put it in the class of just one more attempted step in advance. But it did recreate interest in the field.

The new type of electro-surgical unit delivered for the first time a really satisfactory cutting current and at the same time a coagulating current, which, when properly applied, does actually stop bleeding. The most important point is that the cutting and coagulating are done so rapidly and so effectively that an immense field can be covered during the time limit available for performing this most major of all major operations.

The Caulk cautery-punch was the first satisfactory "bloodless" approach to the subject. It marked the rebirth of a dying enthusiasm for transurethral work and was the first procedure to attack the hypertrophied prostate itself, with the definite idea of removing appreciable amounts of prostatic tissue, and to Caulk must be handed the laurel wreath for the renaissance of transurethral surgery. In this group of active contributors must be considered most carefully the instruments of Bumpus of Pasadena, and of Clyde Collings of New York. Collings' machine has its own unique field, but many skillful, experienced operators, today, prefer the Braasch-Bumpus punch to any other type of working element. Following these men, Day and Kerwin and Foley each added refinements and kept the latent interest inflamed over a period of twelve years, until suddenly Davis, after modifying the Stern loop and working with the Bovee cutting-coagulating instrument, read his epochal article in Philadelphia, in 1930. McCarthy, working with Wappler in New York, produced a new and better working element with an added retrograde lens for checking, from within the bladder; and the stage was set. Alcock, of the University of Iowa, with material much more vast than that of Davis, took up the torch, and two years later, in Toronto, presented a staggering picture of successes and failures. Alcock did not do a preliminary suprapubic

opening in his early cases, as did Boyd of Atlanta. He approached the subject directly by the closed transurethral route, taking cases just as they came, using the transurethral method in all. Despite his care and skill, coupled with complete control of the operating unit at Iowa, his first case report was marked with crosses like a battle field in France and it was he who said that, after having gone through this valley of despair, he felt that no one really could begin to acquire the touch or have any sense of being at home in this particular field, until he had done at least 75 cases and followed every point in the preparation and after-treatment with the most meticulous care. Certain it is, that each succeeding group of 50 cases showed a most marked reduction in the number of crosses, as his eye and hand became more keen and his selective judgment, at a given point, more discriminating.

After a like number of cases, as he reported at that time, we feel inclined to agree with him that no one, not even the most carefully trained cystoscopist, who has been looking at bladders and, particularly, at posterior urethras all his life, can feel even fairly safe with the procedure until he has gotten past the first 100 cases. Perhaps Boyd was right in doing his first group of cases after preliminary opening of the bladder from above. As he says, to quote, "I have sincere sympathy for the surgeon who encountered operative accidents and post-operative complications because, in spite of every precaution which the most skillful of us may employ, undesirable accidents do occur. But I am entirely out of sympathy with those men who have, in order to gain experience in the use of this operation, begun using it without adequate *protection of the welfare of the patient*. Even the honesty which they exhibit in reporting their bad results does not excuse them from the blame which they deserve." These are harsh words, but they are aimed at all and sundry, who feel that they must dabble (and *dabble* is the word) in something which they really have no business to touch. Boyd's contention is supported in a general way by the remarkable report of Dr. Harry Rolnick of Cook County Hospital on 897 prostatectomies. Of outstanding interest in this most illuminating report of Rolnick, is the fact

that, of 125 transurethrales done *deliberately* with a previous suprapubic opening, there was not one death. This, to our mind, was the highlight of his report, because at Cook County he was certainly dealing with every kind of protoplasmic risk.

Two years ago, as a result of our own experience, we stated our belief that any gland *could* be resected if the operator were sufficiently skilled and had acquired enough experience. We, likewise, made the assertion that we, personally, much preferred to do a suprapubic enucleation in the grossly enlarged glands and in those where, for any reason, the bladder had to be opened, such as cases of bladder stone, diverticulum, marked infection, et cetera. We see no reason for modification of this belief today. Likewise, we see no indication for transurethral removal after the bladder has been opened, except in carcinoma, fibrous bars and such obstructions, which would be difficult of suprapubic enucleation. Our greatest bugaboo continues to be, as it was two years ago, *sepsis*. Perhaps some of the glands we have resected, in the past, represented the type that one finds in middle-aged men, which are enlarged purely on an infectious basis and are not truly adenomas. Resection in this type merely spreads the infection and leaves a residual gland that requires many months of after-treatment to clear up.

Remember that anyone may have two things the matter with him at the same time. Beware the middle-aged man who has a beginning adenoma and who also has a chronic inflammation of the prostate with edema, which sometimes gives a misleading cystoscopic picture. Get rid of the prostatic infection first by massage and the proper handling with sounds, or you will have a two-years' postoperative job on your hands.

Arbitrary classification of indications and contra-indications are puerile at best. There can be no dogmatic listing in a situation like this, as we have suggested. It depends on the eye and on the judgment of the observer. But in general, we should be inclined to favor this type of approach in those physical derelicts who need help but who are bad risks at best, also in *all* cases of carcinoma, which is the most brilliant picture for transurethral work. The other indications are the fibrous median bar of

early middle age, the small fibrous prostate, which is as truly hyperplastic as the adenoma, but which is very difficult of enucleation by the suprapubic route; also the medium sized adenomas, particularly those of the so-called Albarran or ball-valve middle lobe type.

For definite *contra*-indications we should select:

First—those cases with large stones difficult of lithoprione, for calculi are always infected and in doing a transurethral on these, one merely adds to the conflagration;

Second—diverticula of the base of the bladder (always badly drained and badly infected);

Third—immense prostates above 150 grams in weight (normal weight is 24 grams);

Fourth—massive infection of the bladder with gross pus, which should be drained anyway and followed, naturally, by suprapubic enucleation.

Furthermore, it is our belief that all adenomas are more or less infected. With a gland partly resected and the scope in situ, one has only to introduce the finger in the rectum and press on the remaining gland tissue, to see a stream of pus pour out into the post-urethra. This, coupled with the fact that we do not make a clean enucleation as in the suprapubic procedure, but leave a portion of this infected adenoma, which we coagulate, and create, thereby, an even more likely culture media, possibly accounts for our major difficulty. And since *all urine must pass over this coagulated infected gland, the utmost care in aseptic handling becomes a prime requisite*. We irrigate postoperatively only when clots prevent free drainage, using a small catheter that permits around it a free drainage from the urethra of any collected mucosal secretion. The patient is prepared before operation by urinary tract disinfection, as well as urethral dilatation, for we have found, from experience, that urethral strictures due to trauma by a large scope sheath frequently follow, if sufficient dilatation of the urethra be neglected. We routinely do a vas section and have never had an epididymitis following this procedure, although occasionally we do get a funiculitis, which readily subsides.

We still find that the large bilateral lobe type of ademonia, *with no middle lobe*, is, to us, the most difficult to resect. This type must be excavated (shelled out), keeping distal to the bladder neck, lest it be cut away and result in extravasation. At least three quarters of the gland must be removed to secure results. The enormous middle lobe, at times, causes trouble, until enough is cut away to see clearly one's landmarks. Post-operative hemorrhage caused us very little trouble, it being necessary to re-introduce the scope for secondary bleeding in only two cases in over 500 transurethrales. Incontinence does not bother us any more. Our only trouble on this score was in the early days of resection, when we were forced to use the Davis-Stern resectoscope before McCarthy applied the *fore-oblique panendoscope lenses* to the resectoscope instrument. Then, we regret to say, some sphincters were irreparably damaged, due to our inability to give definite location to our landmarks with a limited vision instrument.

While resection is primarily indicated in carcinoma, fibrous bars and small adenomatous obstructions, it is just as illogical to say that it should be used in all types of glands, as it is to say that all obstructions should be removed, for instance, by the perineal route. We feel that the best interest of both patient and operator will be served by the use of a little more common sense in adherence to the fundamental principles of surgery and the application of the proper procedure to the case in hand; be it resection, suprapubic or perineal removal.

From a general angle, Hugh Cabot puts the whole matter fairly and very succinctly when he says, "If the operation is to be done by the general surgeon or the occasional operator on the prostate, then the safest way is with the knife, with a 15 per cent mortality. If it is to be done by experts, then there are now on record well over 6,000 cases in total, done with a mortality of

less than 2 per cent, including all risks, and a hospital confinement of a week or even less in some rare cases, with functional results as good, or even better, than that obtained by older methods."

One of the most serious criticisms has been the commercialization which has developed among certain urologists, who wished to advertise their ability to do this operation. Perhaps they are not to blame for this advertisement of the procedure being carried directly to the layman. The whole medical profession is perhaps to blame, for it could have been prevented had the profession insisted upon strict adherence to ethical methods in expressing its approval or disapproval of the success of the procedure. It might have been well, from the beginning, for the American Medical Association to have had a committee investigate personally the extravagant claims of efficiency made by some operators, who have proclaimed in American Medical Association sections that they had practically *no* bad results or that the results of the operation were almost perfect.

For ultimate conclusion, we realize most fully that an unbiased and honest attitude of expression concerning this procedure has been, undoubtedly, detrimental to those of us who have been outspoken in our opinions of the claims made by over-enthusiastic operators and oftentimes a large part of this work has been carried to those who have made the loudest, most unmodified claims for the operation. This is of secondary importance, for it still gives us, in these hectic days, a very healthy sense of pleasure to state exactly what we think and believe concerning this most exacting procedure for the relief of obstruction at the bladder neck.

The limitations of the operation of transurethral resection practically lie within the limitations of the man behind the cystoscope.

ECZEMA, URTICARIA, AND ALLIED DERMATOSES*

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Long before von Pirquet had established the conception of allergy, it was commonly recognized that dermatitis caused by plants, and urticaria caused by the ingestion of foods were manifestations of hypersensitivity of the skin. The studies of the three last decades have greatly enlarged our knowledge of hypersensitivity, the importance of which has been recognized especially in skin eruptions of the urticarial, the erythematous and the eczematous types. Many facts concerning the mechanism of hypersensitivity remain to be elucidated. The problem is further complicated by the loose employment of such terms as allergy and idiosyncrasy, and particularly by the indiscriminate use of the term eczema.

Clinically there are three groups of skin eruptions due to hypersensitivity. (Table I.)

The first group includes the majority of drug eruptions, lesions caused by proteins, especially foods, and the majority of the exanthematous eruptions due to infections. This group can easily be distinguished from the other two. It is, however, much more difficult to differentiate group II from group III as they often resemble each other very closely, particularly if the lesions have undergone a secondary change, such as eczematization in neurodermatitis or lichenification in contact dermatitis. Indeed, it took a long time for these two groups to be separated, and even today the word eczema is used sometimes to mean one form, sometimes the other. In the writer's opinion the use of the term eczema should be applied to the whole group of skin diseases in which inflammatory changes such as vesicles, papules, local erythema, or edema feature the clinical picture primarily or secondarily. Thus the term eczema would be eliminated as a designation of a definite type of skin disease.

This eczema group will include dermatitis venenata or contact dermatitis and neurodermatitis both starting in a clinically normal skin. In addition, eczema-like eruptions may appear in a pathologically changed skin, such as may result from stasis, seborrhoea, ichthyosis, dyshidrosis,

tinea and other infections. Besides these types there are certain eczematous eruptions, for example the so-called nummular eczematous plaques, the classification of which is not satisfactory at present. The different forms of eczema in infants are only specialized instances of the above mentioned groups.

For a long time a classification was attempted on the basis of whether eczema was caused by exogenous or by endogenous factors. Today we believe that all these eruptions are due to the action of an exogenous factor on an organism whose sensitivity is primarily increased. Only in the case of simple dermatitis venenata is the insult purely traumatic. In such a traumatic venenata individual differences of the reaction are determined by the degree of protection offered by the fat content of the skin, the thickness of the horny layer, and similar factors.

In neurodermatitis the irritant almost always enters the body through the mucous membranes, especially of the respiratory or intestinal tracts and affects the blood vessels and the lymph vessels of the skin primarily. Therefore the primary lesion in neurodermatitis is a wheal, as in urticaria, or a papule, as in prurigo, the center of the process is situated in the corium and there is infiltration around the vessels. On the other hand, in contact dermatitis as in traumatic dermatitis venenata the skin is affected usually by direct contact from the outside. Sometimes, however, the irritant enters the body through ingestion, such as in the case of certain chemicals which are used in preserving foods, plant oils which are used as spices, and dyes which are added to foods. In contact dermatitis the

*Read at the Michigan State Medical Society meeting, Section on Dermatology and Syphilology, Detroit, September 23, 1936.

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primary lesion lies in the epidermis and consists of a superficial erythema with vesicle and papule formation.

The pathogenesis of these two conditions is also entirely different.

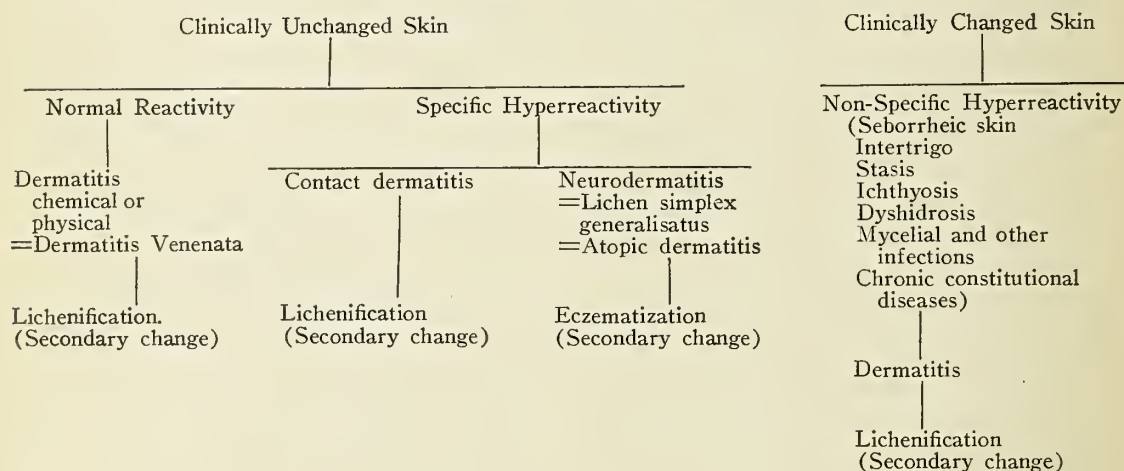
mechanism leading to such conditions as bronchial asthma and hay fever.

Dörr, one of the most eminent workers in allergy, names four points as being characteristic of true allergy:

TABLE I. DIFFERENT FORMS OF SKIN HYPERSENSITIVITY

I	II	III
Exanthematous eruptions Urticaria Angioneurotic edema Erythemas Erythema-multiforme Erythema-nodosum Hemorrhagic eruptions	Neurodermatitis =Prurigo diathesique =Endogenous eczema =Atopic dermatitis =Lichen simplex generalisatus	Contact dermatitis

TABLE II. CLASSIFICATION OF ECZEMA GROUP



There next arises the problem of how these two forms of eczematous skin hypersensitivity are related to each other. To understand this relationship, it is necessary to turn back to our starting point and discuss the meaning of such terms as allergy, idiosyncrasy, and atopy. In a recently published review, entitled "Allergy in Dermatology," Sulzberger deals with the same problems. He formulates von Pirquet's definition of allergy as follows: "Allergy is a specifically altered state, produced by previous exposure, and made manifest by subsequent exposure to the same or some closely related substances." This definition is very comprehensive, but has the disadvantage of being unlimited in its scope. Von Pirquet considered even the changes of old age as being due to allergy. In contrast to this comprehensive definition of allergy a tendency has also developed to limit the term very sharply to indicate that it is a

1. Reactivity varying from normal
2. Specificity.
3. Production of symptoms independent of character of the starting excitant.
4. Presence of specific antibodies (re-agines).

In this limited sense allergy corresponds to the atopy of Coca. This discussion is of special interest to the dermatologist, because in the broad use of the term allergy both neurodermatitis and contact dermatitis may be included while in the narrow conception of the term contact dermatitis cannot be included as yet.

All these problems become much easier to understand if we follow Rössle and permit the concept of pathergy to embrace that of hypersensitivity.

Normal cells affected by a stimulus react in a definite way, which may be called normergic. Any variation in the reaction, Rössle calls pathergy. (See Table IV.)

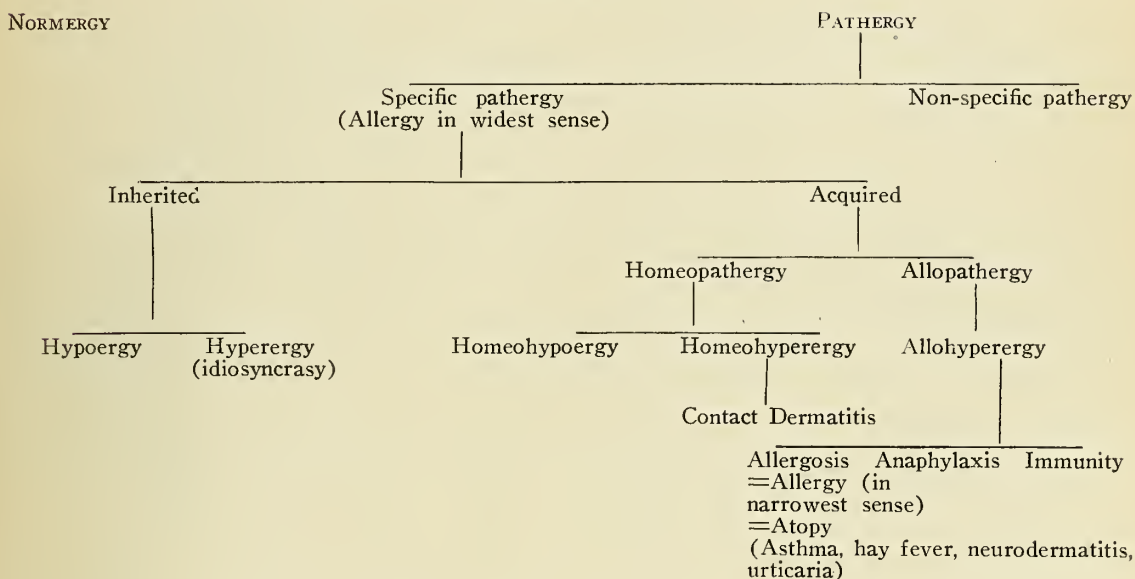
This tissue reactivity can be increased—hyperergy, or decreased—hypoergy. In the majority of cases, pathergy is of nonspecific character as in inflammatory tissue. For our purposes we have to deal only with the

changed in degree (quantitative), which may be called homeohyperergy: or there may be an entirely new form of reaction not occurring in the normal (qualitative), which may be called allohyperergic. As we have

TABLE III. PATHOGENESIS OF NEURODERMATITIS AND CONTACT DERMATITIS

	NEURODERMATITIS	CONTACT DERMATITIS
1. Shock tissue	Corium	Epidermis
2. Reaction time	Prompt, 15-30 minutes	Late, 24 hours or more
3. Characteristic lesions	Deep edema, wheal	Superficial erythema or vesicle
4. Causative agents	Protein compounds	Simple chemicals
5. Diagnostic test	Scratch or intradermal	Patch test
6. Antibodies	Present	Not demonstrated
7. Hereditary character	Present	Absent
8. Allergic disposition	Present (often associated with asthma, hay fever, etc.)	Lacking
9. Reaction compared to normal	Qualitative change	Quantitative change
10. Age of occurrence	Usually in infants	Any age, usually in adults
11. Localization	Face, neck, upper trunk, bends of elbow and knee	Any part of body
12. Clinical course	Definite	Indefinite

TABLE IV



specific pathergy, especially with the specific hyperergy. This specific hyperergy can be inherited or acquired. The inherited hyperergy is identical with the old conception of idiosyncrasy, the best examples of which are furnished by some forms of drug hypersensitivity. The acquired hyperergy (can be acquired during fetal life) corresponds to the wide conception of allergy given by von Pirquet.

It is clear that a tissue can be hyperergic in two ways. The reactivity may only be

seen, the neurodermatitis belongs to the latter group, the contact dermatitis to the former group. Allohyperergy includes allergy in the narrow sense, anaphylaxis, and immunity.

This train of ideas leads to a strict separation between neurodermatitis, urticaria and erythematous eruptions on the one hand and contact dermatitis on the other.

Neurodermatitisallohyperergy
Exanthematous eruptions.....allohyperergy
Contact dermatitis.....homeohyperergy

Even those who do not agree in every detail with the theoretical deductions recognize fully the highly practical value of the sharp differentiation of the types of skin hypersensitivity. It facilitates the search for the excitant and restricts the number of skin tests necessary in the individual case. (See Table V.)

further value. However, the final proof depends upon the effect of elimination and of reëxposure to the suspected irritant. Negative results in scratch and intradermal tests are not as conclusive as a negative patch test.

In this manner we endeavor to find out in each case the excitant but, unfortunately,

TABLE V

CLINICAL DIAGNOSIS	METHOD OF ENTRY OF EXCITANT	NATURE OF THE EXCITANT	DESENSITIZATION
Urticaria, Erythema group	Ingestion Inhalation	Proteins of all kinds Drugs, Infections	Effective
Neurodermatitis	Ingestion Inhalation	Proteins (pollens epidermis, foods, microorganisms)	Effective
Contact Dermatitis	Outside contact Ingestion Rarely inhalation	Chemical compound Occupational Cosmetics Plant oils Dyes, Drugs	Effective only against plant oils

In approaching an individual case, therefore, a careful history and a thorough clinical diagnosis is necessary. The search for the excitant depends, in the first place, upon the result of the skin test. But, as in all other laboratory findings, the result of the skin test needs careful diagnostic evaluation.

First let us consider the positive results. A positive patch test demonstrates by itself that the contact with the substance used in the individual case will produce a dermatitis. But this substance is not necessarily the excitant, because we must always consider the possibility of multiple sensitivity. A negative patch test proves definitely that the substance does not produce a dermatitis on the examined skin area, and rarely do we have to deal with differences in the skin sensitivity between the affected area and other parts of the body.

The results of the scratch or intradermal tests are not as easily interpreted. It is very difficult to estimate the value of a list of positive scratch and intradermal tests. The mechanism of a skin reaction varies so from that due to natural exposure to the irritant that it is easy to understand the discrepancies that may occur. This is due to differences of exposure, of the concentration of the allergen and other factors. Repetition of the test, passive transfer, and examination of the leucopenic index after exposure to the suspected excitant are sometimes of

we are not always successful. It is then necessary to determine whether we are really dealing with hypersensitivity. It will be recalled that neurodermatitis, with its typical localization and clinical course, is always allergic, but that contact dermatitis, due to hypersensitivity, cannot be distinguished clinically from traumatic venenata. In the urticarial and erythematous group the situation is much more confusing since in many of these eruptions a relation to hypersensitivity does not exist. It is the general belief that many cases of urticaria are not allergic. For instance, urticaria due to insect bites, urticaria factitia, and urticaria due to heat and cold can never seriously be considered as allergic manifestations, but rather as due to toxic and mechanical insults.

Stokes, Kulchar and Pillsbury, in their excellent article point out that the hereditary factor, gastrointestinal disturbances, focal and intercurrent infections are of the greatest importance and recent observations by Waldbott also make evident some of these facts. Stokes and his collaborators believe that urticaria is usually due to a combined action of various factors. This idea is very suggestive, but in the individual case it is often difficult to decide whether a pathological finding indicates the causative factor or is part of the morbid reaction.

The treatment of skin diseases, due to hypersensitivity, is based on an exact clinical diagnosis and the detection of the ex-

citant. There are many nonspecific, local and general therapeutic possibilities, but of greatest importance is the elimination of the irritant and the use of specific desensitization. Hospitalization is a great aid in facilitating the elimination of the irritant. With specific desensitization we have had good results in neurodermatitis and in the urticaria-erythema group. Often, however, the results are transitory and, therefore, the treatment must be carried out over a long period of time. In contact dermatitis we have never seen a favorable result in desensitization except in desensitization with plant-oil.

These opinions have been presented in quite a positive way. It is obvious that

many of the points discussed will need further investigation, especially the conception of allergy, the presence of antibodies in contact dermatitis, the mechanism of desensitization. Practically, however, the physician today is already in a position to use an established technique and to evaluate his results as based upon a large clinical experience.

References

- Blumenthal, F., and Jaffe, K.: Ekzem und Idiosyncrasie. Monograph, S. Karger, Berlin, 1933.
 Pirquet, C. von: Allergie München. med. Wehnschr., 30:1457, 1906.
 Stokes, J. H., and Garner: Amer. Jour. Med. Sci., (April) 1936.
 Stokes, J. H., Kulchar, G. V., and Pillsbury, D. U.: Arch. Derm. and Syphil., 31:470, 1935.
 Sulzberger, Marion B.: Jour. Allergy, 7:385, 1936.
 Waldbott, George: To be published.

HYSTERECTOMY FOR FIBROIDS*

A Study of Postoperative Complications

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This study is an analysis of the immediate and remote sequelæ following hysterectomy for uterine fibroids. It is based on 894 hysterectomies for fibroids performed at the University of Michigan Hospital by forty-seven different operators over a period of thirty-two years. Variations in technic and operative care associated with changing trends during a third of a century are represented.

TABLE I

HYSTERECTOMY FOR UTERINE FIBROIDS (1901-1932, inclusive)		
Operation	Number of Cases	Per cent
Total Hysterectomy	191	21.4
Subtotal Hysterectomy	670	74.9
Vaginal Hysterectomy	33	3.7
Total	894	100.0

Choice of Operation

The relative preference for the total, subtotal, or vaginal type of hysterectomy is shown in Table I. The more frequent use of the subtotal operation has continued throughout the whole period and generally reflects the policy of the department; namely, that in the absence of significant cervical disease subtotal hysterectomy is to be preferred. We subscribe to the principle of conservative gynecology and firmly believe

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TABLE II

POSTOPERATIVE COMPLICATIONS			
Operation	Number of Cases	Number With Complications	Per Cent
Total Hysterectomy	191	41	21.5
Subtotal Hysterectomy	670	94	14.0
Vaginal Hysterectomy	33	4	12.1
Total	894	139	15.5

that the subtotal operation, generally speaking, is associated with less trauma and morbidity to the patient. In the presence of significant disease of the cervix the total operation becomes our choice. The small number of uterine fibroids removed by vaginal hysterectomy indicates our preference for the abdominal approach. Only the smaller, freely movable tumors have been handled in this manner. That great skill and low mortality may be achieved by this

TABLE III

POST-OPERATIVE COMPLICATIONS								
Complications	Complications in 139 Cases							
	Entire Series 894 Cases		Total Hysterectomy 191 Cases		Subtotal Hysterectomy 670 Cases		Vaginal Hysterectomy 33 Cases	
	No.	%	No.	%	No.	%	No.	%
Abdominal and vaginal wound infections	76	8.5	22	11.5	53	7.9	1	3.0
Peritonitis	21	2.3	5	2.6	16	2.4	0	.0
Thrombophlebitis	20	2.2	4	2.1	16	2.4	0	.0
Operative injury to intestine, bladder or ureter	20	2.2	6	3.1	14	2.1	0	.0
Shock and cardiac failure	18	2.0	7	3.7	11	1.6	0	.0
Pneumonia	16	1.8	7	3.7	9	1.3	0	.0
Pyelitis and pyelonephritis	13	1.4	6	3.1	4	.6	3	9.1
Pulmonary embolism	11	1.2	4	2.1	7	1.0	0	.0
Recto- and vesico-vaginal fistulae	7	.8	5	2.6	2	.3	0	.0
Intestinal obstruction	4	.4	1	.5	3	.4	0	.0

method is well demonstrated in the work of N. Sproat Heaney, a skilled specialist in this type of operation.

Morbidity

The incidence of post-operative complications is shown in Table II. In Table III, the post-operative complications are given. These figures include all of the significant post-operative complications, including the causes of death. They show that there is definitely a higher morbidity for the group subjected to total hysterectomy. During the 32 years covered by this study the operators whose work is here analyzed have varied in skill and judgment. Although the higher morbidity in the patients subjected to total hysterectomy may, in part, be attributed to these factors, we believe that this higher morbidity also represents the greater hazard naturally associated with the total operation. Contrary reports in the literature on this subject more often represent the work of a few men and seldom include results over such a long period of time.

These reports are valuable in so far as they show what can be done, but in our opinion they do not give a true picture or cross section of the risks associated with the various types of hysterectomy.

Mortality

The mortality in the patients operated prior to 1932 is shown in Table IV. The absolute mortality of 4.7 per cent and 3.1 per cent for total and subtotal hysterectomy, respectively, includes all cases of fibroids complicated and uncomplicated except those associated with cancer. The mortality for hysterectomy for fibroids only, as shown in Table V, compares favorably with the figures obtained from the literature of hysterectomies for fibroids not complicated by other pelvic disease. Table VI.

In the last 140 hysterectomies for uterine fibroids, performed at the University of Michigan Hospital since 1932, the mortality has been 1.4 per cent, a percentage which also compares favorably with the statistics available on this subject. There was one

HYSTERECTOMY FOR FIBROIDS—GARDINER AND KRETZSCHMAR

TABLE IV

MORTALITY RATES			
Operation	Number of Cases	Number of Deaths	Percentage
Total Hysterectomy	191	9	4.7
Subtotal Hysterectomy	670	21	3.1
Vaginal Hysterectomy	33	0	0.0
Total	894	30	3.3

TABLE V

MORTALITY RATE Cases Without Associated Pelvic Pathology			
Operation	Number of Cases	Number of Deaths	Mortality %
Total Hysterectomy	147	5	3.4
Subtotal Hysterectomy	499	10	2.0

TABLE VI

MORTALITY RATES Hysterectomy for Uterine Fibroids		
Authors	Total	Subtotal
Read and Bell	2.9%	2.0%
Mayo and Mayo	1.8%	1.2%
Amreich	6.0%	1.4%

death, from pulmonary embolism, in the subtotal group of 110 cases, an incidence of 0.9 per cent. Of the twenty-five cases upon whom total hysterectomy was performed during this period, one died from an associated tuberculous peritonitis. There have been only five vaginal hysterectomies performed for uterine fibroids since 1932, and no deaths occurred among these. We are of the opinion that the definite decrease in mortality, since 1932, represents not so much a change in operative technic as it does more thorough pre-operative preparation and selection of patients.

The possibility that the pre-operative condition might be an important factor in accounting for the difference in morbidity and mortality between the total and subtotal operation groups in this series was considered. It was difficult to evaluate this factor properly for the entire group; but, after careful study of the records of those who died, the operative risk (as shown in Table VII) indicated a larger number of poor risks in the subtotal group. This does not appear to be reflected in the morbidity for the entire group, and may have been balanced by the lesser risk and ease of performance of the subtotal operation.

JANUARY, 1937

TABLE VII

OPERATIVE RISK IN PATIENTS WHO DIED FOLLOWING HYSTERECTOMY		
Risk	Total Hysterectomy	Subtotal Hysterectomy
Good	5	8
Fair	4	7
Poor	0	6
Total	9	21

TABLE VIII

CAUSES OF DEATH			
Cause of Death	Entire Series	Total Hysterectomy	Subtotal Hysterectomy
Peritonitis	14	5	9
Pulmonary embolism	7	3	4
Cardiac failure	3	0	3
Shock	3	0	3
Pneumonia	2	1	1
Renal insufficiency following operative ligation ureter	1	0	1
Total	30	9	21
Autopsies performed in 53% of the cases			

Surgery in good operative risks alone reduces morbidity and mortality, but, occasionally, operation must be resorted to in spite of poor general condition. Obvious situations calling for operative treatment are infected or rapidly degenerating (infarction) fibroids, certain fibroids complicating pregnancy, and suspected sarcomatous degeneration. Some of the earlier hysterectomies in this series were performed in the presence of an extremely low hemoglobin. This practice is no longer permitted. Now blood transfusion is liberally used in anemic patients. If bleeding is profuse and uncontrollable by ordinary means, x-ray or intra-uterine radium may be used to control the bleeding until the patient's condition can be improved sufficiently to justify hysterectomy.

Analysis of the deaths (Table VIII) reveals peritonitis as the chief cause. The fact that five, or 2.6 per cent, of the patients subjected to total and only nine, or 1.3 per cent, of those having a subtotal hysterectomy developed a fatal peritonitis, suggests a greater risk from bacterial contamination in the total group in spite of careful pre-operative vaginal preparation.

A higher incidence of pelvic thrombosis is suggested by the greater number of deaths from pulmonary embolism in the total group. Always startling, this complication is still seen occasionally in spite of care and

gentleness in handling of tissues and avoidance of trauma. The six patients who died of cardiac failure, or shock, were fair or poor pre-operative risks. Perhaps by more prolonged pre-operative preparation, these patients might have survived. Of the two patients who died of pneumonia, one was a poor operative risk, with heart disease and hyperthyroidism, who died forty-eight hours after the subtotal hysterectomy—obviously an example of poor surgical judgment. The other died eight days after secondary closure of the ruptured abdominal wound. One patient died as a result of accidental ligation of the right ureter. Death resulted twenty-one days later of renal insufficiency in spite of pyelotomy.

Remote Complications

A questionnaire study of the 864 cases of hysterectomy who survived was made to obtain information concerning the remote complaints and complications that developed in these patients. Thirty-eight per cent of the patients replied. It was found that among those who replied, 35 per cent and 28 per cent of the patients subjected to subtotal and total hysterectomy, respectively, had a leukorrheal discharge of sufficient degree to cause concern. Since this occurred with almost the same frequency in both groups, it appears unlikely that retention of the cervical stump is of particular significance. Especially do we feel this to be true in cases where the cervix is cauterized or otherwise satisfactorily treated at the time of operation. In most of the patients operated on prior to 1932, the stump was given no treatment. Since 1932, however, all cases are treated either by cautery or coning out of the endocervix prior to subtotal hysterectomy.

Vaginal bleeding was recorded by approximately 5 per cent of the total and subtotal groups. This, likewise, would suggest that the retained stump was of little significance.

The occurrence of cancer in the stump has been emphasized as an important sequela. One patient returned to the hospital five years after subtotal hysterectomy because of vaginal hemorrhage. The cervical biopsy showed squamous cell carcinoma. Another stated, in the questionnaire reply, that she had had radium and x-ray therapy for alleged carcinoma of the cervix. We have been unable, by careful follow-up, to determine the presence of cancer in any of the

others. These two cases represent about 0.8 per cent of the replies.

Pearse, in a recent follow-up of 802 subtotal hysterectomies performed over a period of twenty-six years, reports an incidence of vaginal discharge in 18 per cent of the cases in whom the cervical stump was given no special treatment and 12 per cent in those with treatment. He found that vaginitis was the cause in most cases. He also reports the occurrence of carcinoma in the cervical stump in about 1 per cent of cases. He concludes that "unless the mortality from total hysterectomy can be shown to be the same or less than that for supravaginal hysterectomy *in the same type of case*, the possibility of later cancer of the cervix should not be considered an indication for complete extirpation."

Comment

Eight hundred and ninety-four consecutive cases of hysterectomy for uterine fibroids have been reviewed from the standpoint of mortality and the immediate and remote morbidity. The results of the study would indicate that there is an appreciable risk from any hysterectomy, particularly in cases complicated by local or general pathology. Every recommended hysterectomy should take into account the patient's general condition and, where this condition is unsatisfactory, necessary steps should be taken to improve it. This is clearly shown by the fact that in the uncomplicated cases in this series the mortality was much lower than in those where complications existed.

The greater morbidity and mortality following total hysterectomy and the lack of evidence that there is any appreciable difference in the remote complications following subtotal hysterectomy seems to justify the use of subtotal hysterectomy except for patients in whom there is a clear-cut indication for removing the cervix. The apparent incidence of cancer in the cervical stump following subtotal hysterectomy in this series is so small that it could hardly be considered an indication for the routine use of the total operation with its greater risk.

The use of vaginal hysterectomy in the treatment of fibroids is, generally speaking, wisely limited to the smaller tumors in women with relaxation. We are of the opinion that the technical difficulties to be encountered in attempting to remove large fixed tumors by this method would appreciably increase morbidity and mortality.

Bibliography

1. Amreich, Isidor: Die supravaginale amputation und die vaginale und abdominale totalerextirpation bei myomen, adnexen, extra uterinegraviditäten und benignen ovarialzystomen. Ztschr. f. Geburtsh. u. Gynak., 88:68-96, 1924.
2. Heaney, N. Sproat: A report of 565 vaginal hysterectomies performed for benign pelvic disease. Am. Jour. Obst. and Gynec., 28:751-755, (November) 1934.
3. Mayo, Charles H., and Mayo, Charles 2nd: Carcinoma of the cervical stump following subtotal hysterectomy. Ann. Surg., 93:1215-1219, (June) 1931.
4. Pearse, R. L.: Supravaginal hysterectomy; a statistical

survey of 1,900 cases, with especial reference to the later development of carcinoma in the retained cervix. Surg., Gynec. and Obst., 58:845-851, (May) 1934.

5. Read, C. P., and Bell, A. C.: Hysterectomy subtotal and total—A review of the mortality and morbidity of the subtotal and total operations on a series of 2,344 consecutive cases at the Chelsea Hospital for Women in the ten year period 1922-1931, inclusive. Jour. Obst. and Gynec. Brit. Emp., 40:749-767, (August) 1933.
6. Spencer, Herbert R.: Remarks on total hysterectomy for myoma of the uterus (with special reference to cancer of the cervix after subtotal operation). Brit. Med. Jour., 1:1157-1160, (June 25) 1932.

OXYCEPHALY

Report of Two Cases with a Summary of the Literature

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Since Von Graefe definitely recognized and described the occurrence of ocular signs in oxycephaly, in 1866, the condition has been the subject of numerous investigations and many cases have been reported. The disease is not rare. The exact number of cases reported is not known since some of them are doubtful and others appear to be repetitions. In 1910, Fletcher⁶ found between eighty and ninety cases in the literature. Since that time at least a hundred more have been added. Males are more frequently affected than females.

Various terms have been used to designate the syndrome known as oxycephaly. Chief among these are "Turmschadel," "Spitzkopf," "tower-skull," "turret-skull" and "steeple-head." The clinical characteristics are the typically tall skull, the exophthalmos, and the optic atrophy. The shape of the skull is usually striking, being dome-like with tall forehead sloping up to the bregma. At the bregma there is often a crest or ridge in the position of the sagittal suture. The exophthalmos may be slight or very prominent. Many cases are reported in which the eyes were so prominent that the lids would not close over them in winking or in sleep, and disastrous corneal changes ensued. In other cases the exophthalmos was so slight as to be hardly noticeable. Atrophy of the optic nerve may be so marked that there is total blindness or it may be absent entirely. Other less frequent findings in oxycephaly include squint, nystagmus, ptosis, medullated nerve fibres in the retina and feeble-mindedness. Each of these has been noted at one time or another.

Case Reports

Case 1.—A colored boy, aged eleven, complained that he could not see well with his right eye.

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He had first noticed poor vision four years before. He stated that his eyes had always protruded somewhat. In November, 1932, he had been seen at the Children's Hospital of Michigan. At that time the hospital records show that with correction the boy's vision was 20/50 with the right eye and 20/20 with the left eye. When first seen in February, 1936, the vision was limited to light perception with the right eye and was 20/25 with the left eye. Both eyes were moderately protruded, though not enough to prevent the cornea from being covered by the lids in winking. The right eye was divergent about 20 degrees and fixation was eccentric. The ocular movements were normal. Pupillary reactions and tension to fingers were normal. There were no corneal changes. Ophthalmoscopic examination showed normal fundi except for the nerve head of the right eye. This was pale and the edges were more or less irregular. The nerve head in the left eye appeared normal. The boy had a rather marked tower skull, with high forehead and tall egg-shaped cranium. The ears appeared to be set rather low on the head. There were no other deformities. The refractive error under homatropine mydriasis was

OD —1.50 sphere —1.00 cylinder x 180 = L.P.
OS —1.50 = 20/25

Case 2.—A white man, aged forty-five, complained of frontal headaches and poor vision. He stated that his failing eyesight dated back at least twenty years and perhaps longer. He had been seen in a number of clinics elsewhere. In 1927 a tentative diagnosis of hypopituitarism and (?) lues was made. In 1928 a report from one of the clinics in which he had been seen stated that "no cause for the optic atrophy had been found." He was admitted to the diagnostic clinic of Harper Hospital in February, 1936. The history was unimportant except for those facts mentioned above. The results of the examination are quoted in part from the Harper hospital records: The patient was a well-developed male. There was no lid-lag or other sign of exophthalmos. The right ear drum was moderately injected; the left normal. Nose showed some deviation of the

septum and enlargement of the turbinates. Mouth was edentulous. The pharynx was injected and there was some post-nasal drip. Lungs, heart and abdomen were normal. B. P. equalled 155/95. The cranial nerves except for the second were normal. There was some slight inferiority of adiokinesis of the left hand and slight increase in the patellar reflex in the left; otherwise the neurological examination was negative. The vision with correction was 20/200 with each eye. The blood Kahn test was negative, the NPN was 46.2 mgm. per cent, and the fasting blood sugar was 117 mgm. per cent. A spinal puncture revealed a pressure of 160; gold curve 0000000000. Ophthalmological examination showed the extra-ocular muscles to be normal. The pupils seemed to react very slowly to accommodation but were otherwise normal. A perimetric test showed the visual fields to be markedly constricted for both eyes, with the most marked constriction below. Ophthalmoscopic examination showed typical advanced atrophy of both optic nerves, of the primary type. It was noted that the patient showed a moderate degree of oxycephaly, the skull being rather tall. Since no other cause for the optic atrophy had ever been found this was considered very suggestive. X-rays were taken in the hopes of confirming this opinion. The reports are quoted: "A single film of the skull in the left lateral direction shows a somewhat turret-type skull with no evidence of increased intra-cranial pressure. No erosion of either inner or outer table. The sella turcica is of average size and normal in contour; its floor is smooth. There is calcification of the choroidal plexus and of the pineal gland." An encephalogram was done and reported: "The skull was examined in standard positions following removal of 65 c.c. of cerebrospinal fluid and its replacement with air (60 c.c.). The ventricles are normal in size though they are slightly distorted at their anterior aspects due to the configuration of the skull. No evidence of increased intracranial pressure changes. No tumor shadow. Conclusion: Aside from the slight distortion of the lateral ventricles due to the shape of the skull, no abnormality is made out." An examination was made of the optic foramina: "Both are quite small. The left optic foramen is smaller than the right. Instead of the foramina having the usual round shape they tend to have a somewhat oval shape. The size and configuration of the foramina might be a factor in this patient's visual disturbances." For permission to use this case in this report I am indebted to Dr. William H. Gordon.

All writers on the subject are now agreed that the direct cause of oxycephaly is a premature synostosis of the cranial sutures. This is easily shown in x-rays of the skull in patients with the condition and has been confirmed whenever a post-mortem examination has been made. The question of what initiates the synostosis is more uncertain. Meningitis, pachymeningitis, rickets, lues, and tuberculosis have all been cited by different authors at one time or another.^{2,5,11,14} Ida Mann¹⁰ has recently expressed her belief that oxycephaly is not due to any fortuitous disease of the bones, but is a definite clinical entity. She feels that the idea that rickets, lues, osteitis, or fetal men-

ingitis is the cause should be abandoned. Instead, she suggests that failure of the visceral mesodermal regions to develop may be the main etiological factor. It is true that certain cases are congenital and seem to be due to a familial constitutional defect. These cases are usually associated with such stigmata of degeneration as deformities of the ears, highly arched palate, webbing of the fingers and other faults of development, all of which may be explained on the basis of mesodermal mal-development.¹²

The term oxycephaly as it was used in the older literature included various types of cranial deformities. For this reason the exact number of cases of actual oxycephaly which have been reported is not known and statistics on the condition are inaccurate. In the more recent literature there has been an increasing tendency to divide oxycephaly into several subvarieties, chiefly oxycephaly proper, acrocephalosyndactyly, and cranio-facial dysostosis. Acrocephalosyndactyly as described by Apert¹ is a condition characterized by varying degrees of syndactylism and other developmental defects in addition to the tower skull. Ocular defects occur in some cases, the most usual being exophthalmos, various ophthalmoplegias, and optic atrophy. Cranio-facial dysostosis was first described by Crouzon. Deformities of the face and head include prognathism, small under-developed upper jaw, hooked nose, and brachycephalic or oxycephalic cranium. Ocular findings are present as in acrocephalosyndactyly and oxycephaly proper.

These three syndromes are undoubtedly closely related and are probably variations of the same thing. All have familial tendencies and are nearly always associated with various stigmata of degeneration such as deformities of the ears, high palate, spina bifida occulta, acrocyanosis, etc. In this connection it is interesting to note that oxycephaly is frequently found in congenital hemolytic icterus. Gannslen⁸ first noticed this, and Gunther⁹ has published a comprehensive study of the subject. The hemolytic icterus is thought to be only another link in the chain of constitutional inferiority, which includes syndactyly, polydactyly, tower skull, etc.

The cranial and ocular findings in oxycephaly can all be explained on the basis of the premature ossification of the cranial

sutures. In normal children the growth of the brain causes a natural expansion of the skull, depending on the adaptability of the various unclosed sutures. Synostosis begins normally at the age of thirty and is not complete until an advanced age. When the synostosis takes place prematurely the cranial vault can no longer expand laterally or antero-posteriorly. Instead, under the influence of the growing brain it expands upwards. Since ossification of the sutures is delayed longest at the anterior fontanelle, or bregma, there is often a crest or ridge at this point where the pressure induced by the rapidly growing brain has caused a bulging. Thus it is seen that the tower-shaped skull probably represents a compensatory process. The more adaptable the cranial vault is to the increased intracranial pressure, the more marked the oxycephaly will be. There are other deformities of the skull which are due to the increased intracranial pressure. The middle and anterior cerebral fossæ are deepened and there is distortion of the greater wing of the sphenoid. The sella turcica may occupy an unusually deep position and is often distorted. Because of the distortion of the sphenoid and the deepening of the anterior fossæ the orbits are more shallow than normally, producing exophthalmos. The protrusion of the globes may be great or slight, depending on the amount of involvement of the base of the skull. The distortion of the sella turcica and the sphenoid, and the deepening of the middle fossæ may often change the position and shape of the optic foramina.

With regard to the optic atrophy there is some disagreement as to the cause. It has been attributed by various authors to early intracranial hypertension, to mechanical factors involving a change in size or shape of the optic foramina, and to meningitis. There is something to be said with regard to each hypothesis. We are inclined to accept the contention of Friedenwald⁷ that the optic atrophy is secondary to chronic papilledema. That long standing intracranial hypertension does occur in oxycephaly is undisputed. Bedell⁸ and others have observed choking of the nerve head in a number of cases. Furthermore, quoting Bronfenbrenner, "the syndrome caused by long duration of increased intracranial pressure—marked convolitional digitations, attenuation of the

calvarium, narrowing of the diploë, flattening of the air sinuses, et cetera—is a constant finding in oxycephaly." In any case of chronic papilledema there is more or less damage to the optic nerve which is apt to be permanent. And finally, the fact that in the majority of cases the atrophy is of the post-neuritic type bears out this theory. Mechanical factors undoubtedly play a part in the production of optic atrophy in some cases; however, compression with the optic canal, torsion and twisting of the optic nerve due to changes in the region of the chiasm, and change in size, shape, or direction of the canal have all been cited as the cause.^{4,13} These factors are without doubt contributing in many cases, and in some may be the direct cause of the atrophy.

The disease is much more common than is generally believed and it is interesting that more cases do not come to the attention of ophthalmologists. For the most part only those cases are seen which present themselves for examination because of a visual defect.

The treatment of the condition lies within the domain of the neurosurgeon. In early cases, where an increase in the intracranial pressure is evident, a decompression, performed either on the cranial vault or on the optic foramina, may halt the process and prevent damage to the brain and optic nerve. In other cases treatment is usually hopeless and for the most part unnecessary, since cerebral or optic atrophy in most cases occurs only in infancy and does not progress.

Comment

Two cases of oxycephaly with optic atrophy are presented. It is only by repeatedly having them brought to our attention that we can find conditions such as this one fresh in our minds. The clinical value of these two cases lies in the fact that they serve as a reminder of a not unusual cause of optic atrophy.

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Bibliography

1. Apert, E.: De L'acrocephalosyndactylis. Bull. et mem. Soc. med. d. hop. de Paris, 23:1310, 1906.
2. Bardenzelli, T.: Clinical contributions to the study of oxycephaly. Arch. di Ottal., 39:201, 1932.
3. Bedell, A. J.: Oxycephalus. Jour. A. M. A., 68:1979, (June 30), 1917.
4. Behr: Changes in the region of the bony canal in steep skull. Read before the German Ophth. Soc. 50th Annual Meeting, August 6-8, 1934. Reported in Arch. Ophth., 13:914, 1935.
5. Brönfenbrenner, A. J.: Oxycephaly as a clinical entity. Am. Jour. Dis. Child., 42:837, 1931.

6. Fletcher, H. M.: On oxycephaly. *Quart. Jour. Med.*, 4:385, 1910-11.
7. Friedenwald, H.: Cranial deformity and optic nerve atrophy. *Am. Jour. Med. Sc.*, 105:529, 1893.
8. Gannslén, M.: Ueberhamolytischen Ikterus. *Deutsches Arch. f. klin. Med.*, 140:210, 1922; 146:1, 1925.
9. Gunther, H.: Der Turnschedel als Konstitutionsanomalie und als Klinisches Symptom. *Ergbn. d. inn. Med. u. Kinderh.*, 40:40, 1931.
10. Mann, Ida: A theory of the embryology of oxycephaly. *Trans. Ophth. Soc. U. K.*, 55:279, 1935.
11. Meltzer: Für Pathogenese der Opticusatrophie und des sogenannten. *Neurol. Centralbl.*, 27:562, (June 16) 1908.
12. Pino, R. H., Cooper, E. L., and Van Wein, S.: *Ann. Intern. Med.* In press.
13. Ponjick: Breslauer arztl. Zeitschr., 7:54, 1885. Quoted from Fletcher.
14. Potts, W. A.: Reports of the Society for Study of Diseases in Children, 8:407, London, 1908, quoted from Fletcher.

THE SIGNIFICANCE OF CHRONIC HOARSENESS*

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Appreciation of the clinical significance of hoarseness began with the introduction of the mirror laryngoscope by Babington, in 1829 and its development as a diagnostic instrument by Czermak, in 1858.

For many years following that first real advance in the science of laryngology, published articles revealed intensive study and investigation along diagnostic and therapeutic lines. Now such procedures have been rather well standardized. Laryngologists are now attempting to make a forceful plea for early diagnosis in order that certain chronic afflictions of the larynx may be recognized at a period when they are amenable to treatment.

The existence of some sixty causes of the symptom of hoarseness precludes the possibility of a comprehensive discussion of this subject in the brief time allotted. It is necessary to limit the scope of this presentation to the more common diseases producing *chronic* hoarseness as a prominent symptom.

Let us consider chiefly the problem of early accurate diagnosis and the applicability of accepted therapeutic measures in the cases comprising the so-called laryngeal triad.

Syphilis, tuberculosis and cancer. One is apt to consider laryngeal involvement by one of these diseases a rare occurrence. Such is not the case. Patients with these lesions are seen frequently and in increasing numbers. Unfortunately, it is not uncommon to see patients in the late stages of one of these conditions which has gone unrecognized and untreated over a period of several months.

Indirect laryngoscopy, or the visualization of the larynx with the aid of a small dental mirror, should be mastered by every practitioner of medicine. The technic is simple, as is the physical equipment. Following this procedure a reasonable *tentative* diagnosis can be made in most every case. Without

laryngoscopy it is impossible to tread upon sound ground in the institution of any therapeutic measures. Too many times are opinions and treatment based on "*not having seen the larynx.*"

Syphilis in any of its three phases may attack the larynx. The primary sore is rare, however, in this situation. Secondary luetic laryngeal involvement is not uncommon and, unfortunately, renders itself difficult of diagnosis. It may simulate exactly an acute nonspecific type of infection. The characteristics are a diffuse hyperemia and epithelial hyperplasia in the form of mucous patches. Diagnosis is facilitated by other manifestations of the disease such as the primary sore, the roseola, mucous patches elsewhere and the specific reaction of the blood serum. The larynx is vulnerable also to the ravages of tertiary luetic lesions. These may be either diffuse or nodular. Characteristically they are painless (except in the latter stage of ulceration), dusky red and hyperemic and tend to appear on the epiglottis, the arytenoids, the aryepiglottic folds and ventricular bands; that is, in the areas within the larynx where the blood and lymphatic supply is greatest. After ulceration occurs there is assumed the classical punched out appearance with the sloughing base of the ulcer.

Treatment of this condition is, of course, general. Compounds of arsenic, mercury, bismuth and the iodides are the required

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drugs whose indications for use are familiar to all of us.

The important sequelæ of tertiary syphilitic laryngitides are cicatricial contractures and stenoses. In the larynx as elsewhere, gummata heal by the production of hypertrophic scar. Such complications occasionally demand the surgical reconstruction of an airway.

Tuberculosis of the larynx is not to be considered a primary laryngeal diseases. It is in practically every case a complication of an active and advanced pulmonary lesion. Although there have been some cases reported as primary tuberculosis of the larynx, these have been subject to dispute. Approximately 25 per cent of cases of pulmonary tuberculosis have some laryngeal involvement. The most likely method of infection is by contact of the laryngeal mucosa with infected sputum. However, there are some who have suggested the possibility of lymphogenous and even hematogenous modes of infection.

As in tertiary syphilis, the pathological lesion is characterized by infiltration and ulceration. The sites of predilection are essentially the same. The epiglottis, the arytenoids and the interarytenoid space are involved most frequently, though no portion of the larynx is immune. Unlike the gumma, the tuberculoma is an avascular, hence anemic granuloma. Ulceration, which, when superficial, is probably due to ischemia of the tissue overlying a tubercle and when deep to caseation necrosis, is not characterized by clean cut punched out edges. The borders are ragged and have a "mouse nibbled" appearance. The base of the ulcer is pale and granular. Dysphagia and odynophagia are prominent symptoms, particularly when the epiglottis or aryepiglottic folds are the seat of the lesion. Diagnosis is facilitated by clinical and radiographic evidence of pulmonary infection.

The two most important items in the therapeutic régime are: first, treatment of the pulmonary condition and, second, complete rest of the larynx. Here, as in other infections of the larynx, we may safely say that if one single local therapeutic measure is to be chosen to the exclusion of all others, it should be laryngeal rest. This means complete silence. Not even whispering is allowed. The patient must use pad and pencil exclusively. When use of the voice

is to be reinstated, brief periods such as meal times are specified at first, then gradually prolonged. Other local measures may be medical, such as ultra violet irradiation, chaulmoogra oil applications or the commonly employed escharotics. Surgical procedures such as actual cauterization in the form of ignipunctures and amputation of the epiglottis are also recommended in selected cases of the chronic variety.

The prognosis under well advised treatment is dependent to a considerable degree upon the progress of the pulmonary infection.

It must be borne in mind that not all cases of hoarseness associated with pulmonary tuberculosis are of specific nature. It is extremely common to find present a simple catarrhal laryngitis which has been produced by a long period of coughing.

Having mentioned briefly and sketchily these two members of the triad only because of their importance in the differential diagnosis of chronic hoarseness, I wish to occupy the rest of my time with a somewhat more detailed discussion of laryngeal carcinoma. This assumes a greater importance, first, because it is strictly a local process, and, second, because a good prognosis is so absolutely dependent upon an early and accurate diagnosis.

The subject of etiology is devoid of scientific facts except in the matter of age and sex incidence. As in the case of malignant neoplasia elsewhere, more cases occur in individuals past the age of forty years. There is no definite age limitation, however. In the University Hospital we have seen four cases under the age of thirty, one of which was in a girl of twenty-two. Seventy-five per cent of our cases have been in patients between the ages of fifty and sixty-five.

Intrinsic carcinoma of the larynx occurs from five to eight times more frequently in men than in women. The reverse situation is noted, however, in extrinsic carcinomata involving the posterior aspect of the cricoid plate, which seem to occur almost exclusively in women.

For years it has been suspected that the presence of chronic infection and benign growths, more particularly the papillomata and fibromata, offered inciting stimuli to malignant changes in the epithelium. The term "pre-cancerous lesion" has developed

not without reason and careful observation. Not infrequently patients under observation for years showing a chronic laryngitis, non-specific chordal ulcer or benign papilloma finally present themselves with an epithelioma. In our own series of cases this situation has been noted several times.

The influence of lues upon malignant disease of the larynx is beyond question. Cancer and gumma have long been recognized as allies, especially in those tertiary lesions which have been allowed to run a long course uninterrupted by antiluetic therapy. Although the influence of such lesions upon the subsequent development of cancer is not understood scientifically, we must concede that in the combined destructive and constructive activity of a gumma lies a pathologic process comparable to the development of a cancer.

Maintaining the likelihood of the above inferential evidence, possible preventive measures are brought to mind. All chronic ulcerations and benign tumors of the larynx should be regarded in a more serious light. They should be made the object of energetic treatment and careful observation. Prolonged strict laryngeal rest following the removal of sources of infection in the nose and throat should be routine in all cases of contact ulcer and chronic non-specific laryngitis. All benign neoplasms and areas of hyperplasia should be removed by surgical methods radical enough to dispose of them completely. Again, laryngeal rest must be the order until complete healing occurs. It is gratifying to note the rapidity with which non-specific ulcerating surfaces heal under this regime. As laryngeal gummata respond quickly and completely to anti-leucic therapy when instituted early, the recognition of this condition in its early stages is of paramount importance.

The records of our clinic show a constantly increasing number of registrations of patients suffering from malignant disease. The growth of the clinic and the fact that lay people are made "cancer conscious" by various public health programs may be responsible in some measure. However, the increasing percentage of malignancies in young people suggests the possibility of an actual increase in the number of cases developing.

Practically all laryngeal cancers are epitheliomata. The most important classifica-

tion of this condition deals with the position of the lesion. Laryngeal cancers are said to be intrinsic if situated entirely within the voice box; that is, if they are on the vocal cords, in the ventricle or immediately subglottic; and extrinsic if they lie upon the periphery of the organ. In the latter case they may be found upon the epiglottis, the aryepiglottic folds or upon the posterior surface of the arytenoids or cricoid plate. In late cases mixed lesions are found in which all parts of the larynx are involved.

Extrinsic cancers of the larynx are characterized by insidious development and early metastases to the cervical lymphatics. Since a vocal cord is not the primary seat of the lesion, hoarseness is not an early symptom; rather the patient is apt to complain of dysphagia, odynophagia and otalgia. In the later stages, dyspnea supervenes. Except in rare instances complete surgical eradication is impossible. The treatment of choice is x-ray and radium. In most cases the prognosis is grave for both life and recovery.

In contradistinction to the above, intrinsic laryngeal carcinoma offers a most hopeful prognosis. In no other internal organ does a malignant lesion give such early warning symptoms and render itself so available for early diagnosis and successful removal. In the great majority of cases these lesions have their origin on the anterior half of one vocal cord. Even during the early stages, when there is but slight thickening of one cord, voice changes become apparent. As the growth increases hoarseness becomes more pronounced. Pain and dysphagia are absent. Indirect laryngoscopy reveals the neoplasm, which may be in the form of a diffuse subepithelial thickening or even a fungating ulcerated mass. Most of these tumors are slow growing. Since the lymphatic network in the immediate vicinity of the glottis is very scanty and without immediate connection with the cervical chain of glands, metastases are late in making their appearance. The stage described is usually present for several months, allowing sufficient time for diagnosis and successful treatment. As the disease progresses, extension to the contralateral side and periphery obtains with gradually but surely increasing gravity of prognosis. It is in this early stage, which, to repeat in emphasis, usually lasts several months, that

a diagnosis must be made. Any patient within the so called "cancer age," that is, past forty years, who complains of persistent painless hoarseness, even for two weeks, should be suspected of having a cancer until it is definitely disproven. It is imperative that an opinion be based upon thorough laryngeal examination before any treatment is instituted.

Differential diagnosis by means of simple indirect laryngoscopy is often difficult. The three members of the triad may simulate each other very closely. In every case of ulcerative or nodular laryngitis the first required procedure is the elimination of lues and tuberculosis as possible causative agents. Careful inspection of the lesion with attention to previously mentioned differential points facilitates the procedure. In case positive evidence of lues or pulmonary tuberculosis is found we must continue to bear in mind the possibility of mixed lesions. As gummata and tuberculosis may occur together, and since a carcinoma may be found developing within a tertiary syphilide, the patient must continue to be kept under careful clinical observation.

If a carcinoma is suspected, or if with positive extra-laryngeal evidence of syphilis or tuberculosis the lesion has an atypical appearance, or fails to respond in a satisfactory manner to accepted therapy, there is one positively essential procedure to be undertaken. Biopsy and microscopical study of the tissue removed is not only permissible but mandatory. In years past there has been some agitation against so disturbing a malignant neoplasm on the grounds that metastases may be hastened. Some dissenters have advocated a prolonged therapeutic test with potassium iodid in an effort to rule out lues as the causative factor. I feel very strongly that there can be no contra-indication to the establishment of a positive diagnosis by means of a well performed biopsy for the following reasons:

1. Our clinical experience leads us to believe that if the decision rests between gumma and cancer, the relative frequency of occurrence is a point in favor of the latter diagnosis.
2. If one were to depend solely upon clinical observation for the diagnosis of cancer it might well result in the total

extirpation of a larynx in a case of non-malignant disease.

3. A prolonged period of observation may do more toward inviting metastases than will the removal of a small bit of tissue.

There is some and probably very real danger of inciting a carcinoma to increased rapidity of growth through the trauma inflicted by the taking of a biopsy. This certainly is increased if the lesion is macerated by unskillful manipulation. If, however, the bit of tissue for microscopical study is removed from the edge of the lesion by means of careful and skillful instrumentation, and if the patient is prepared for any indicated surgical attack within forty-eight hours, the dangers of promoting metastases are minimized.

Although the laryngologist must have a positive microscopical diagnosis of cancer before extirpating a larynx, he must bear in mind also that one negative report on a biopsy does not preclude the possibility of malignancy in a suspected case. The bit of removed tissue may reveal the benign papillomatous surface only, when evidence of the true nature of the lesion is to be found infiltrating its base. In the event that carcinoma is suspected, biopsies must be repeated until a representative bit of the base has been obtained, or until the entire growth has been removed through intralaryngeal approach.

The treatment of intrinsic carcinoma is dependent upon the position, the extent and the cell type of the lesion and upon its rate of growth as evidenced by its clinical behavior. As each case presents an individual problem, it is necessary to consider all aspects of the condition before making a decision regarding the most efficacious means of combating it.

Much attention has been given to Broders' classification of carcinomata into grades 1, 2, 3 and 4. Whether or not one agrees strictly with this scheme, he must admit the fact that carcinomata do vary in their degree of malignant degeneration. In certain cases the malignant growth is very slow while in others it is fulminating and most devastating in its spread.

In type 1 we are dealing probably with local hyperplasia of epithelium, in which there is a tendency to malignant degener-

CHRONIC HOARSENESS—MAXWELL

TABLE I. ANALYSIS OF CASES DIAGNOSED

TYPE	NO.	AV. AGE	SEX		AV. DURATION OF SYMPTOMS	DISPOSAL			
			M	F		IRRADIATION	SURGERY	NO. TREAT. ADVISED	TREATMENT REFUSED
EXTRINSIC	15*	59.2 YR.	11	4	14.5 MO.	11	0	4	0
MIXED	9	59.4 YR.	8	1	13.8 MO.	5	3	0	1 (X-RAY)
INTRINSIC	21**	56.7 YR.	17	4	11.8 MO.	1	17	0	2 (TOTAL L.) 1 (HEMI L.)

*3 cases with post-ericoid involvement, all females.

**2 cases developed in recurrent papillomas. 1 case developed in a gumma.

TABLE II. ANALYSIS OF CASES TREATED

TREATMENT					RESULTS			
TYPE	IRRADIATION	TOTAL LARYNGECTOMY	HEMILARYNGECTOMY	LOCAL REMOVAL	DEATH	NO IMPROVEMENT	RECURRENT	APPARENT CURE
EXTRINSIC	11	0	0	0	4	4	1	2 TREATED BY X-RAY
MIXED	5	2	1	0	2	2	3	1 TREATED BY X-RAY
INTRINSIC	1	1	13	3	2	1	3	12 TREATED BY SURGERY

ation only after a period of months or even years. In this type, I believe, it is possible to do a conservative operation such as the removal of the growth with punch forceps or by means of actual cautery or surgical diathermy carried out through a laryngoscope. It is obvious that this type of operation is applicable in selected cases only.

In the more advanced and infiltrating, yet well differentiated lesions corresponding to Broders' types 2 and 3, if one is willing to accept a classification of this kind, there is infiltration beyond the obvious borders of the growth requiring more radical procedures to effect a cure. Laryngofissure and hemilaryngectomy are the operations of choice and should be applicable to almost every case. The one prerequisite is early diagnosis! These operations may be used whenever the lesion is limited strictly to one vocal cord. As the vast majority of intrinsic laryngeal cancers stay so limited for many months after hoarseness first appears, it should be necessary but rarely to perform a total laryngectomy. The advantage of these procedures lies in the removal of one half the larynx only, following which the patient regains a speaking voice and uses his natural airway.

Total laryngectomy or the complete surgical extirpation of the larynx is necessary when there is invasion of both vocal cords or a vocal process. Although the procedure is formidable and leaves the patient voiceless and with a permanent tracheostomy, the results are excellent if no metastases have preceded the operation. The prospects of a voiceless post-operative existence should never act as a deterrent. If the operation is not done when indicated, the continued growth of the neoplasm soon renders the patient not only voiceless but dyspneic to the point of urgent need for tracheotomy. Coming to the clinic at intervals for check-up examinations are several laryngectomized patients with complete cures; none of these regrets the loss of his cancerous larynx; some are using an artificial larynx to excellent advantage; all have been able to resume their places in society.

In the highly undifferentiated or type 4 forms of carcinoma surgery is of little value in any case. Extensive infiltration and metastases develop so rapidly that the neoplasm frequently is found to have invaded the thyroid cartilage and the extrinsic musculature by the time the patient consults a laryngologist. The radiologist by special

technique is able in some cases to demonstrate these perforations in the thyroid cartilage and thus be of service in determining the extent of infiltration. Such radiographs are not uniformly reliable and should be used as an aid only in diagnosis. It is of extraordinary interest to note that very few clinicians have reported such cases as cured for a period of longer than five years after any type of surgical operation. Massive doses of x-ray given preferably by a modified Coutard method is the treatment of choice in these undifferentiated forms which are much more vulnerable to radiation than are the more highly differentiated types which must be treated surgically.

Since carcinomata are not necessarily homogeneous from the standpoint of their cell type, I feel that a single massive dose

of x-ray might well be given over the larynx of a patient who is a candidate for laryngectomy. This may be used also prior to laryngo-fissure or hemilaryngectomy since it is possible for the trained radiologist to give massive doses of x-ray to the larynx without producing destruction of cartilage. I would suggest that operation be delayed for about two weeks following irradiation. This combined attack embodies all of the known procedures and influences which speak for eradication of the growth.

The necessity for early recognition and adequate treatment of carcinoma of the larynx is emphasized in the accompanying analytical review (Tables I and II) of the forty-five cases of this condition seen at the University of Michigan hospital during the three years preceding July 1, 1935.

URETHRITIS: A STATISTICAL STUDY

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This presentation is a study of 100 private male patients with urethritis from a social as well as medical standpoint. The cases were taken in order from my own office files beginning with the letter A and all were included until 100 had been collected. The accompanying tables illustrate graphically the various points to be brought out.

Table I.—Of 100 male patients with a urethral discharge when first presenting themselves for treatment, sixty-six had gonorrhea as a cause of their urethritis, thirty-two other pus producing organisms and one an intra-urethral chancre. Five of those first seen for a non-specific urethritis, later on returned with the gonorrhea, one of them twice. Sixty of the 100 patients had a history of a previous gonorrheal urethritis.

Table II. — Of the total seventy-one patients taken care of for gonorrhea, thirty-nine had a prior history of gonorrhea, 56 per cent.

Table III. — The cases of non-specific urethritis, thirty-three cases, gave a history of gonorrhea in twenty-two cases, 66 per cent, showing the major rôle played by antecedent gonorrhea in this type of infection. For the remaining eleven, as a cause of the discharge, we have drugs used as prophylactic in three, furunculosis, diabetes, syphilis, liquor accompanied perhaps with sexual strain and three without any admitted cause. The exact part in these tragedies played by masturbation is hard to determine though perhaps important and more common than

TABLE I. CLASSIFICATION OF URETHRITIS—
100 CASES

Gonorrheal urethritis	66
Non-specific urethritis	32
Both non-specific and gonorrheal urethritis	5
Luetic urethritis	1
No previous venereal disease	40
Previous venereal disease	60

TABLE II. GONORRHEAL URETHRITIS—
71 CASES

Previous venereal disease	39
No previous venereal disease	27
Non-specific urethritis and gonorrhea	5
Non-specific urethritis and two gonorrheal infections	1

TABLE III. NON-SPECIFIC URETHRITIS—
33 CASES

With a history of gonorrhea.....	22
Without history of gonorrhea	11
Furunculosis	1
Chemical urethritis (drugs).....	3
Diabetes	1
Lues	1
Strain, liquor, etc.....	2
Cause undetermined	3

†Dr. Hull graduated from University of Michigan in 1911. He is Associate Attending Urologist, Receiving Hospital and Grace Hospital, Detroit.

is suspected. The urethritis accompanying diabetes and lues cleared on the treatment of the cause, as did that occurring during a series of boils.

TABLE IV. SOCIAL STATUS
Seventy-One Cases of Gonorrhea

Married	18
Single	52
Undetermined	1
Divorced	1
Widower	1

Thirty-Three Cases of Non-Specific Urethritis

Married	10
Single	23
Widower	1

Table IV. — The social status of these two groups is shown in Table IV. Of the seventy-one gonorrheic patients, eighteen were married, fifty-two single, one undetermined. There was one divorcee and one widower. Thirty-four per cent married would seem to indicate that there is a certain amount of protection against contracting gonorrhea afforded by marriage to the ordinary man. Ten of those with non-specific infections were married, twenty-three single, including one widower.

TABLE V. TIME IN DAYS BETWEEN EXPOSURE
AND APPEARANCE OF DISCHARGE

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	21.
0	4	3	4	5	5	2	2	1			2		2			1

Number of Attacks of Gonorrhea

One	38
Two	12
Three	4
Four	
Five or more	6

Table V. — The interval in days between exposure and the appearance of the discharge, is shown in Table V. These intervals, as recorded, were accurate according to the patient. A good many seemed unable to be positive because of multiple exposures. The rather prolonged interval, in some few cases two to three weeks, may seem to differ from the ordinary conception, but is correct and is of social interest in that the patient is infectious during that interval. Of the sixty admitting of venereal history, thirty-eight had had one prior attack; twelve had two; four had three, and six had five or more. The question of the recurrence of the same or old infection, comes up here. The time interval between attacks and admitted exposure, the clinical course of previous attacks as described,

seemed to bear out the statements of these men that they had been freshly infected each time. That it can happen is shown by one patient who acquired gonorrhea four times in six years, recovering without much difficulty each time. Along with one of these infections he also picked up a chancre. This was his second attack of syphilis.

TABLE VI. MULTIPLE VENEREAL INFECTION

Syphilis	4
(a) Reinfection after eleven years. Positive dark field	1
(b) Luetic urethritis. Positive dark field	1
Treatment with mercury discontinued eighteen days previous to appearance of new lesion.	
(c) Positive Wassermann and history. Treatment refused	2
Chancroid	2
Erosive Balanitis	1

Table VI.—Multiple venereal infection occurred in several. Two penile chancres were seen in connection with urethritis, one of the cases having an accompanying gonorrhea and the other being an intraurethral lesion without gonorrhea. This latter case was interesting in that the patient was under treatment for syphilis at the time and said that eighteen days prior to the appearance of the discharge he had finished a course of mercury injections. The dark field examination was positive for the treponema. The lesion was not in the same location as that of his previous infection. Two other patients had positive Wassermann reactions, knew of their trouble but refused treatment. There were two cases of chancroid and one of erosive balanitis.

Table VII.—The most frequent major complication of gonorrhea is epididymitis. There was a history of an epididymitis in thirteen of the sixty who had attacks of gonorrhea before I saw them, 21 per cent. Eleven had epididymitis when first seen, having been treated by themselves or by another physician, 15 per cent, and eight developed epididymitis while under my care, 12 per cent.

There were eight cases of acute prostatitis in the series, 11 per cent. Three of these developed an acute epididymitis. In the five cases known to have had a non-specific prostatitis and seminal vesiculitis before contracting gonorrhea, two developed epididymitis, 40 per cent, and one an acute prostatitis, 20 per cent, unusually high per-

centages. Two cases developed periurethral abscesses, necessitating operation, one being referred for that condition. One patient developed a gonorrheal proctitis, infecting himself while taking an enema. Refusal by a patient to permit of a dorsal slit being done, resulted in a severe balano-posthitis. He became psychotic and was institutionalized for a while. There were three cases of gonorrheal rheumatism, two in repeaters who had had rheumatism in a previous attack. The third case was particularly interesting as he infected his wife, who also developed an arthritis. It does not seem as though this were merely a coincidence but that it would show a selective affinity for certain tissues by this strain of the gonococcus. One Cowper's gland abscess was operated on.

TABLE VII. COMPLICATIONS OF GONORRHEA

	Bi-	lateral	Right	Left	Total
EPIDIDYMITIS :					
(1) During previous attacks of gonorrhea	5	3	3	13	
(2) Care of self and other physician	3	5	3	11	
(3) Care at office	2	4	2	8	
Acute prostatitis				8	
Acute epididymitis as a complication				3	
Non-specific urethritis and gonorrhea				5	
Acute epididymitis				2	
Acute prostatitis				1	
Periurethral abscess				2	
Proctitis				1	
Balano-posthitis				1	
Psychosis				1	
Rheumatism				3	
(a) First attack—infected wife and wife had same				1	
(b) Attack of rheumatism during other attacks of gonorrhea				2	
Stricture				10	
Large calibered No. 20 F, bulb				1	
Large calibered No. 14-18 F, bulb				6	
Filiform, bulb and penile				3	

Ten per cent of these 100 patients had urethral strictures. Nine were in the group having a non-specific urethritis and one had an acute gonorrhea. Perhaps there were strictures in the group of gonorrheic patients who left while there was a discharge containing gonococci and whose urethras, therefore, could not be examined. With all of these cases there was an easily demonstrable infection of the prostate and seminal vesicles, which, I believe, always accompanies stricture. The calibres and other data on these strictures are shown in Table VII.

Table VIII.—Consideration of the results of treatment is not particularly flattering.

Forty of the gonorrheic patients, I am sure, were cured of their infection, 56 per cent. Five discontinued treatments of their own volition and undoubtedly got well. Four became dissatisfied and went to some other physician. One patient was sent back to his physician as he had been referred only temporarily. Eleven left immediately or within a week, due to lack of money, hospitalization at the expense of the community, to the Board of Health clinic or perhaps to their own tender care and that of the corner drug store. Three were consultations and seven left the city and were referred elsewhere. It would seem that being unable to see more than 56 per cent of a group of patients through to the end of their infection, is not a good record. Probably no other disease gives such a large percentage of patients who fall by the wayside as far as the physician and his treatment are concerned.

TABLE VIII. RESULTS OF TREATMENT

<i>Gonorrhea—Seventy-One Cases</i>	
Cured	40 56%
Probably cured (discontinued treatments of own volition)	5
To other physician, dissatisfaction	4
To other physician, his case	1
Few or no treatments (dissatisfaction, no money, Board of Health)	11
Consultations	3
Left city	7
<i>Non-Specific Urethritis—Thirty-Two Cases</i>	
Symptom free (at least temporarily)	22 68%
Treated for sixty days or more, with some improvement	4
(1) Recurrence on drinking, left town	1
(2) Intercurrent infection, small-pox, no result	1
(3) Stripping	1
(4) Stricture	1
Discontinued treatment immediately or within a week	5
(1) Died of small-pox	1
(2) Strictures	3
(3) Referred out of town. Stricture [included in (2)]	1
(4) Sex neurasthenic	1

The results in the thirty-two cases of non-specific urethritis are twenty-two with cessation of the discharge and improvement, 66 per cent. Four were improved but still retained a mild urethral discharge, a morning drop. One of these four was free of trouble for a short time only to have a recurrence after getting drunk. Another went through an attack of small-pox, reporting that while he had the small-pox, he was free of discharge, but it returned on recovery from

that disease. Another, I am sure, kept up his own discharge by persistent stripping of the urethra. Of the remaining five who discontinued treatment immediately or within a week, three had strictures. One of these was referred out of town with instructions to continue dilatation of his stricture. A fourth died of small-pox. The fifth was classed as a sexual neurasthenic and was seen occasionally with a return of the discharge, due to a persistent desire to do something for himself, that is, use an injection, bougie or other medicinal agent, which he thought he needed at times.

TABLE IX. TIME OF TREATMENT OF URETHRITIS

Gonorrhea, acute, no previous infection or treatment	(9)	71 days
Gonorrhea, acute, acute prostatitis as a complication	(3)	106 days
Gonorrhea, acute, chronic prostatitis as a complication	(4)	333 days
Gonorrhea, acute, with treatment by self and other physician, at office	(13)	113 days
Gonorrhea, acute, with treatment by self and other physician, in all		159 days
Gonorrhea (previous infections), no other tract pathology	(8)	58 days
Gonorrhea, (previous infections) chronic prostatitis of gonorrheal origin..	(14)	225 days
a. Cleared completely of gonorrhea and prostatitis	(4)	
b. Cleared completely of gonorrhea with residuary prostatitis	(10)	
Gonorrhea, chronic, with residuary prostatitis and gonorrhea	(4)	112 days
Non-specific, no history of gonorrhea	(5)	25 days
Non-specific, history of gonorrhea..	(14)	61 days

Table IX.—In Table IX, are charted the time taken in the treatment of these cases of urethritis. The average length of time of nine cases of acute gonorrhea, with no prior infection, was seventy-one days until discharged as cured. Three patients with an acute attack, complicated by an acute prostatitis, took an average of 333 days. This is the type of case where a search for other foci of infection is necessary. One of these men cleared very quickly after a tonsillectomy. Thirteen cases, treated elsewhere and by themselves for a time before I saw them, took 159 days, on an average, to get well; 113 days under my care. With no other pathologic change in the genito-urinary tract, but a history of other gonorrheal infection, eight cases were cured in an average of fifty-eight days. These men appeared for treatment immediately on recognizing their trouble and were willing to

go the limit as far as their personal hygiene and treatment was concerned. Of fourteen with a new infection, complicated by a chronic prostatitis of gonococcal origin, four were cured completely in 225 days and ten in the same length of time of the gonorrhea, but still had a residuary prostatitis and seminal vesiculitis. These ten, however, I believe, were free of the gonococcus. Four patients were treated for an average of 112 days without freeing them from the gonococcus before they discontinued treatment with me. Without taking into consideration the strain of the gonococcus acquired and the individual resistance of the patient, about both of which we are rather uncertain, the severity of the infection and length of time required for a cure are directly dependent on infection of the urethral glandular adnexa, the glands of Littre, Cowper's gland, prostate and seminal vesicles.

In the group with non-specific urethritis, five cases, with no history of gonorrhea cleared within twenty-five days: two completely; three with no discharge, but a remaining prostatitis and vesiculitis. Fourteen with a history of previous gonorrhea were clear in an average of sixty-one days, one completely and the other thirteen still having a residuary prostatitis and vesiculitis. It is in this latter group that we find the cases of stricture requiring periodic dilatation. Also those having indefinite pains, located variously in the perineum, rectum, penis, testes, suprapubic area and back, which flare up at times, due to indiscretions in diet, drink and sex activity. In this group are the cases with fibrosed prostates and seminal vesicles and scarred posterior urethras, which later on may develop obstruction at the neck of the bladder.

Considering this small series of cases from a social point of view, it must be evident that from the standpoint of the patient there is very little protection against venereal infection being afforded the individual by society as a whole. Human nature must be accepted as it is for the present and our efforts directed toward the eradication of the foci of infection, the carriers, both male and female. This is the job of the physician. The efforts to raise the morals of the community by education should be continued.

A VISIT TO SCANDINAVIA

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DETROIT, MICHIGAN

"I do not make that common mistake of judging another according to what I myself am. . . . While I feel that I am pledged to a certain manner of existence, I do not oblige every one to adopt it, as some men do; and I know and conceive a thousand contrary ways of life, and, unlike people in general, I perceive more easily the difference than the resemblance between us. I exempt another as much as you please from being of my conditions and principles, and consider him simply in himself, measuring him by his own model. . . . I vividly put myself in the place of others, and I like and honor them all the more because they are different."—MONTAIGNE.

The most difficult of all arts is the art of living. Seeing it practised in different countries by different people is a privilege. One strives to understand this art in home environment, in college and in legislative halls. Untried theories are like the hypotheses of bachelors and old maids who declaim volubly upon how to discipline children. North America is a land of great dimensions, great numbers, wonderful privileges, innumerable problems, mixed races, and unbounded possibilities. The complexities existing are a challenge for deliberate consideration of other peoples who believe they have gone far in solving certain problems in human relationships. Scandinavia has been heralded in popular literature as a veritable laboratory for "middle way" experiments in socialistic living. How far this work has been carried along and how successful have been the results will be discussed.

One may always count upon taking to the sight what he will see in the seeing. Historical, geographical and socialistic knowledge of countries to be visited should be acquired. Language communication with the people visited is exceedingly important.

It is incorrect to say that English is freely spoken in Norway, Sweden, or Denmark. If one has a German as well as an English vocabulary at his command, he will extend his conversational privileges considerably, but the Scandinavian smiles best and relaxes most when the conversation is in his own tongue. If one cannot speak one of the languages of these countries, he should by all means find a companion who can. It is of great advantage to sail on a boat of the country to be visited. It provides a threshold of entrance. Even the stomach needs the opportunity for accommodation to new flavors and differently prepared foods. The disciplines of the country are learned. Friends are made among

those with bilingual accomplishments and from these new friends much is learned in specific information about the country to be visited. The stories, yarns and narratives of each other's countries provide further basis for companionship.

The M/S Gripsholm of the Swedish-American Line is equipped with a luxurious and well-booked library. The librarian, Miss Mabel Engstrom, A.M., a Swedish-American teacher trained in the Universities of Indiana and Chicago, proved exceptionally efficient and amiable in supplying information about the places to be visited.

Good maps of the countries to be visited can intensify interest, and do much to correct misinformation, and economize time. It is especially helpful and stimulating to read popular articles and governmental reports concerning countries to be visited. Some excellent references to Scandinavia are listed at the end of this article.

In 1922 one of us (Davis), when contemplating a visit to the University of Freiburg, Germany, was asked by Professor Ludwig Aschoff if he was prepared to come in a pro-German or neutral spirit. A number of friends who were permitted to read Professor Aschoff's letter were intensely emphatic in criticising him for such a request. However, Aschoff was right in asking for this attitude.

After having visited in France, Austria, Germany, Italy, Great Britain and the Scandinavian countries, it is proper to observe that one should not visit a foreign country for pleasurable and educational purposes unless he can manifest a spirit of fairness and toleration.

Larsson was born in Sweden and has a fluent command of Swedish, German and French languages, an excellent command of ancient and modern Swedish history, and a native's knowledge of the country's customs.

He had never harbored revolutionary ideas and could claim all the privileges of a returning son.

Davis was born in Canada and of parents from England and Scotland. Whether his forebears were Celts, Angles, Jutes or Saxons, he cannot just say, but he has been well schooled in British traditions.

With this ancestral preparation, it was not difficult to develop enthusiastic anticipation of things to be learned and enjoyed in the lands of coöperative living.

With free facilities to use and understand a country's native language and the privileges of close association with some of her intelligent citizens, one becomes highly equipped for rapidly understanding the characteristics of a people and their institutions. This was our privilege and good fortune. At Gothenburg, Sweden, we were met by Professors Gustaf Larsson and Axel Larsson, who had planned to pool their vacations with ours. We were to have expert guidance and the joys of fine friendship with two gentlemen who were native sons of Sweden, equipped with extended university training at Uppsala, Sweden; Oxford, England; Grenoble, France; and Greifswald, Germany.

All four in the group possessed cosmopolitan experience and fluency in English. Three were qualified to use Swedish, French and German languages. Two were experienced teachers in Swedish educational institutions, and one in American universities.

The Viking Age

The word "viking" in the early Norse literature was used to designate a grand tour, e.g., "he went a-viking." Historians of the North have set apart what they called the "Viking Age" as referring to a time of universal disturbance or unrest among the Scandinavian nations. It was a time of folk-wanderings. This age in English history began in 789 A. D. with an appearance of Danish pirates in Dorset, England, followed by other visits by pirates from Norway, Denmark, et al, made to different parts of the British Isles in 793, 795, 798 and 802 A.D. Then for a generation all raids were made upon the west coast of Ireland, and probably Scotland. In 842 A.D. one-half of Ireland was conquered and to some extent settled by these raiders. Monastic colonies appeared to have been especial-

ly singled out for visits. Further history of the Viking records widespread attacks, especially upon England, also upon Northern France and all western lands, and to the east in Russia.

The Viking folk were ahead of the Christian nations at this time in shipbuilding. In the eleventh century Normandy was under Viking rule, as was also East Anglia, and these were considered the best governed parts of France and England.

The term "Viking" has been considered synonymous with cruelty and destruction by sea rovers, but modern historical scholarship appears to show that the underlying reasons were much the same as those given by nations who have in recent times engaged in wars of conquest. The noted Danish historian, Steenstrup, gives the main cause of Viking raids as overpopulation, for families were large and inheritances were not divided but were kept intact for the first-born, thereby forcing those without inheritance to seek their fortunes at large. About the year 1000 A.D. a Swedish Viking is reputed to have crossed the North Sea, visited England, Ireland, then traveled northward to Scotland, the Orkneys and Shetland Islands, thence to Iceland and farther west to Greenland. Returning to Europe, he visited northern France, Italy, Greece, Gibraltar, Constantinople, thence home by way of Russia, Courland, Esthonia, Livonia and Finland.

In the Younger Stone Age, or about 2000 B.C., archeological records show evidence of Scandinavian visitations to these eastward-lying lands.

Norway

A long, slender, mountainous country shapes the western side of the Scandinavian peninsula. In length it is equal to the distance from the Great Lakes to the Gulf of Mexico, but in area only 124,964 square miles, equalling the size of New Mexico. Its population is approximately 3,000,000. Norway holds wonderful secrets to tell. Its mountains are magnificent, its fjords startlingly beautiful with inlets, rock-bound bays, and tumbling waterfalls dropping abruptly upon brown steep clefts into deep blue surfaced waters to tell the world its story of a daily 15,000,000 horsepower development. The fjords are long, narrow arms of the sea, often extending far inland and bounded

by high cliffs. Their origin, according to folk lore, is mysterious but has been attributed to "volcanic whoopee" when the world was young, and to slow-going glaciers stopping on their way to land—glaciers being slower getting to where they are going than anything else in the world. The cruise of the Gripsholm extended 112 miles up the Hardangerfjord, a name with gifts of music to Norwegian ears, glories to poets' themes, and dreams to minds of mystics.

Norway is proud of her culture, of her great dramatists, notably Ibsen; great novelists, including Bjornson; great story tellers, such as Jonas Lie, and great composers, among them Grieg, whose songs Lillian Gustafson, of New York, sang effectively in the concert hall of the Gripsholm when but a few miles from the composer's birthplace. This country's population is singularly homogeneous. Fishing, in certain years, has been valued as high as twenty-seven and a quarter million dollars, and is, with forest, agricultural and nitrate products, its chief resource. Every year 115,000 silver foxes are exported, and there are approximately 20,000 good fox farms in Norway. An excess of milk and hogs prevails in this country.

Oslo, Bergen, Trondhjem and Hagesund are its four largest cities. The last-named looks down upon the Hardangerfjord.

Norway's foreign trade, per inhabitant, is more than five times that of the United States. The Norwegian merchant marine is numbered third in the world. The Geophysical Institute in Bergen, under Professor Bjerkness, is regarded as the world's best weather forecasting station. The average length of life is greater in Denmark and Norway than in any other country of the world.

The grandeur of Hardangerfjord, as seen from an ocean-liner, is awe-inspiring, then smiling and friendly as the little plateaus of green, dwarf birch trees and clean red tiled roofs, display habitations of hamlet and city. Hagesund, the largest of these, is Norway's fourth city—a clean, dignified and substantial modern urban creation. The shores of the entire fjord are rocky, and irregularly sloping or rising more or less abruptly to occasional glacier heights, with covering fields of snow. (Norway has the largest glacier in Europe.)

The terminus for navigation of the Hardangerfjord is Eidfjord, a small village facing this long arm of the sea and built on either side of a picturesque rushing mountain stream. Here we saw charming little wild flowers, potatoes blooming in purple and white, other vegetables, some little fields of grain, and hay piled on short, perpendicular poles. A pleasant little journey was made on foot and by auto accompanied by Miss Engstrom, librarian, and Dr. Holmberg, ship's surgeon, along the sharp corners on the mountain side, up, along and in sight of the rushing mountain stream. The rugged beauty charms and lingers in mind, inciting a deep longing to return.

Norway has been called *a summer home of nature*. Few locations on the earth enjoy such freshness or provide so much mental and physical invigoration. The atmospheric conditions are unexcelled, if choice is desired, for the climate is greatly diversified. Even in winter without the sun, there is compensating glitter of stars, glow of the moon and palpitating brilliance of northern lights upon stretches of snow fields.

The people of Norway are more urban than rural; they are of large stature, vigorous, alert in mind and body. Three aims have been before the people for years, (1) fostering educational advantages, (2) development of the arts and sciences, and (3) elevation of labor.

In March, 1935, Johan Nygaardsvold, an erstwhile day-laborer who worked in the U. S. A. from 1901 to 1906, was summoned by the King of Norway to form a Labor Government, a result brought on by the coöperation between the Farmer bloc and the labor representatives. Thus ended the rule of the Bourgeois party. The new government received favorable comment in the press of the country, notwithstanding its plan for a general sales tax to raise seventy-seven millions to meet the unemployment situation.

As long ago as 1837, 92 per cent of the children in all Norway were taught in ambulatory schools, but in 1907, less than 1 per cent were in this type of school. The schools are quite generally graded as elementary, middle, gymnasium, and university schools. In the higher schools, two main divisions of work are planned—the

Real and the Linguistic-Historical. The Real school course is largely scientific. The medical school was founded in 1811 as a faculty in the Royal Frederik University, Oslo. There are, altogether, approximately 5,970 schools in Norway. The buildings are justly reputed to be the most magnificent, best located, and finest edifices of the country, but their furnishings are described as severely plain and often quite uncomfortable. The school interiors contrast painfully with landscapes of small gardens, valley farms, interesting stone-paved valleys, rocky cliffs scantily clad in lower reaches of birches and evergreens, roadsides bedecked with charming little wild flowers and rustic bridges overspanning rushing, tortuous mountain streams on the way to their fjords.

The Norwegian Medical Association is celebrating its fiftieth anniversary this year. There are now 2100 physicians in Norway compared with about 600 in 1885. Detroit has approximately enough physicians to do the work of all Norway.

Sweden

By way of the Skagerack and Kattegatt Seas, past the province of Bohuslan, through long rows of skerries (small isles), we came to enter Sweden's greatest seaport, Gothenburg (Göteborg), via the picturesque estuary of Bohuslan. This city is built upon weathered grey rocks, substantial, impressive and clean. Its docks are business-inviting, business-getting agencies of Sweden's increasing sea trade. Here is a pleasant place in which to shop, stroll or banquet friends. Past little markets on the quays or under rows of spreading trees, one walks leisurely upward and onward by substantial red brick university buildings, the new library and theater, to view the bold and magnificent Carl Milles statue of Poseidon. A short distance beyond is the old fair ground with its Liseberg, or amusement park. About its brilliantly lighted spraying fountains is the open air theater, band pavilion, and fashionable eating places, where food of finest quality may be had at reasonable prices. Here we dined with friends who charmingly welcomed the returning son and their American guest, while the orchestra shifted their selections to Yankee airs.

Gothenburg owes its prosperity to Gustavus Adolphus, the *Lion of the North*, and the champion of Protestantism in Northern Europe. It is a rich and well built city from which are made large exports of iron, steel, timber and wood pulp. This city is situated in the province of Västergötland (not to be confused with the island of Gotland in the Baltic Sea), which lies directly south and east of Bohuslan province, the land of the Vikings and the old sea rovers of the Bronze Age. Here the ancient English hero, Beowulf, the King of the Gauta Goths, lived on the River Gotha, now the beginning of the Gotha Canal from Gothenburg to Stockholm, on which one can travel for fifty-six hours eastward by canal boat to the capital, or to Uppsala, through scenery of wondrous beauty, probably the most beautiful in Northern Europe.

It was in the environs of Gothenburg that the Keltic forebears and conquerors of much of England, Scotland and Ireland had their home. This and other influences make the Briton a blend of the Keltic, Danish, Iberian, Swedish, Norwegian, Roman and Saxon races.

Visby, Island of Gotland (The City of Roses and Ruins)

Here was the emporium of commerce for Northern Europe from the fifth to the fifteenth centuries. We approached this "pearl of the Baltic" in the early morn of a day in August. The island, its surrounding glittering sea, the old wall and ruined churches are the remaining marks of a distributing center for trade established as early as the sixth century by Vikings who sailed down the Volga and Dnieper in their fleets, returning to trade with the Arabs, with the Greeks of Byzantium and later with Saxon England, Flanders and France. Visby, the ancient depository of fabulous wealth in coins, jewels, drinking cups, arms and other current wealth, has yielded rich discoveries. Of 6,000 Roman silver coins dating from the first and second centuries, that have been unearthed in all of Scandinavia, 4,300 have been found in Gotland alone. The greater part of 30,000 Arabian coins found in Sweden were unearthed in Gotland.

Many relics from Ireland have been discovered here, indicating that the Vikings visited this country in search of beautiful wives and fine Irish linen. More than fifty

English towns are represented upon coins dug up in Visby.

Gotland has, in its long and eventful history, been ruled by Danes, Swedes, Norwegians, the Hanseatic League, the Lübeckers and the Russians.

In the Middle Ages, under the powerful and wealthy Hanseatic League, Visby merchants had their own yards and residences in London and Novogorod. The sea code of the Hanseatic fleet has become the foundation of the present maritime laws of the civilized world.

The former glory in Gothic architecture stands nakedly beautiful in the sixteen or seventeen ruined churches and the great wall of Visby.

Gotland has been called "an epitome of the world's history in miniature." Every age is represented in an island no larger than Lincolnshire, England—the Stone Age, the Bronze Age, the Iron Age, and the Middle Ages. Wettersten states that this is the most wonderful island, geologically, archeologically and historically in the world. In 1924, Dr. Wettersten excavated an ancient dwelling in the market place, which was 6,000 years old and dated from the Stone Age; here he found beautifully worked stone axes and pieces of melted bronze and several skeletons.

Along the sloping sea shore, just beyond the great wall which had enclosed and protected the ancient City of Visby, are beautiful gardens of flowers, said by a passing Englishman to surpass the gardens at Kew, London. Here one looks from the glittering blue Baltic with its flocks of sea gulls to the lovely tinted flowers, the pride of the modern residents of this old Viking city.

In the ruins of the old church we saw enacted the play, "Petrus de Dacia," under the management of the Director of Royal Opera of Stockholm. For sheer religious romanticism and natural scenic setting, this play has no peer for this was in St. Nicolaus, the priest's own church, in the heyday of the Hanseatic League.

Visby is now a fair city, of peculiar charm, a veritable pearl of the Baltic Sea.

Stockholm

Stockholm ("the isle of the log"), the capital city of Sweden, founded about 1255, is approached by two beautiful routes: one

by canal steamer through the inland lake region from Gothenburg, the western seaport; the other by ocean boat from the picturesque arm of the Baltic Sea. This Venice of the North is called the most beautifully situated city in Europe, second only in world cities to Rio de Janeiro. It is situated at the junction of Lake Mälaren and the Baltic Sea. Seventeen rock-ribbed islands, with intervening quays, form the site of this fair city, but within its environs are 1,140 islands.

Universities

In Sweden there are four universities and three medical schools. The Medical Department of the University of Uppsala, forty-two miles north of Stockholm, was founded in 1478. The Medical Department of the University of Lund, founded in 1668, twelve miles north of Malmö, Sweden's third largest city, is situated in the southern part of the peninsula; and the Karoline Medical Institute of Stockholm, founded in 1810, which is famous for the work of the great chemist Berzelius. At this last named institution we were privileged guests of Dean Einar Key (Professor of Surgery and Member of the Nobel Prize Committee), who exhibited to us their new medical center, which includes new buildings now nearing completion—a 950-bed hospital, the medical school, nurses' home, a separated orthopedic hospital, a pathological institute, and a projected new Radiumhemmet building, all to be assembled upon a splendid site of 55,000 square meters, in the suburban border of Stockholm. Here, we anticipate, will be the great medical center of Sweden. With Dean Key we visited old St. Maria's Hospital and a modern private hospital, Röda Korsets Sjukhem. A two and one-half hour boat ride and an evening with Dr. and Mrs. Key at Gustafsberg, their picturesque summer home in the environs of Stockholm, afforded us a rare opportunity for discussion of Swedish medical affairs. Our sportsman readers will be surprised to know that within walking distance of Dr. Key's home, moose roamed at will in the forests, and in season here is a hunting preserve.

Of world-wide interest in the field of therapeutic medicine is the Foundation known as Radiumhemmet. Here is available the largest quantity of radium held by

any single institution in the world. This is a centralized irradiation clinic not only for Stockholm but for all of Sweden. The personnel, consultation, and "follow-up of patients" service is considered a model of its kind. At present, work is carried on in an old red brick structure not unlike our medical school building in Detroit. It is an appropriate comment to say, "Once a patient at Radiumhemmet, one must either get well or die before he is released from their follow-up service." The records show that only three patients in a twenty-one year service are unaccounted for. Frequent biopsy sections are taken for microscopic examination. Definite interval physical examinations of patients are made and carefully recorded. Examinations witnessed were thorough, systematic, gentle, tactful and better calculated to hold the confidence of patients than most private consultations we have seen.

Drs. Ahlbom and Heyman were in charge of the clinical work and Professor Olle Reuterwall and Dr. Hansen were directing the work of the Pathological Laboratory. The pathological sections taken before and after irradiations and the clinical-pathological conferences were very interesting.

The clinic secretary and statistician, Fröken Sigrid Boalt, was both courteous and obliging in assigning visitors to places in clinics. Great freedom in access to records and literature of this clinic is allowed visitors.

The abundant clinical material examined daily at Radiumhemmet makes this a notable and unusually profitable mecca for all interested in any phase of neoplastic work.

University of Uppsala (Founded 1477)

Uppsala and Stockholm remind one of Ann Arbor and Detroit in their proximity to one another. The oldest university of Sweden is situated at Uppsala, an old and historic town. Its attractiveness is somewhat overrated. It is certainly a dismal place on a rainy day and does not compare at all favorably with Michigan's university city. The university buildings, with but few exceptions, are old and not very attractive. The new pathological and bacteriological institute, however, is a model. Professor Robin Fahraeus, who had planned this building, was kind enough to show and explain quite in detail the many advantages

incorporated in this new structure. Professor Fahraeus is known for his contribution of the useful "sedimentation test." We found Professor Fahraeus of great service to us as he explained many of the features of medical education in Sweden.

A ward walk through the Surgical Department of the University Hospital with Professor Gunnar Nyström and staff afforded an excellent opportunity to view and learn many of the details of this well-known surgical clinic. The simplicity of treatment and apparatus used and the evidence of strict economy may be contrasted with some of the extravagances seen in many hospitals of America. Professor Nyström is distinguished in Sweden for his surgical skill and literary contributions. His embolectomy work is well-known in America.

The quaint old mediæval brick castle, on a hill overlooking the city, the Linnæus Gardens, and the majestic old cathedral at Uppsala are reminders of important events and personages in Sweden's history.

The library at this university is justly famed for its size and its rare old books, having 800,000 printed publications, 17,000 manuscripts and other collections. We are impressed that our freedom in the use of the library is better at Michigan than is that observed and explained to us in Sweden or Denmark.

University of Lund (Founded 1668)

This is the second of the two state universities and is quite near Sweden's third commercial city, Malmö, situated on the Öresund, a beautiful arm of the Baltic Sea and almost directly opposite Copenhagen, or about two hours travel by boat. It was founded in 1668, or 191 years later than the other state university at Uppsala.

The University of Lund serves directly the southern part of Sweden. Its library contains 350,000 published books and 7,150 volumes of manuscripts and other collections. Here also is a depository of Provincial Archives.

Besides the two state universities of Uppsala and Lund, there are two private universities in Sweden, the Caroline at Stockholm and Gothenburg. Both of these private institutions receive state support and are called state universities by many. In Sweden's 6,500,000 population, three medi-

cal schools upset the balance of the law of demand and supply, for we were informed that last year's surplus of graduates numbered three hundred. In all of the U. S. A. and Canada we have 87 medical schools to serve a combined population of 136,070,392 or one school for each 1,564,027, and here again the product is too large.

Homes

A pilgrimage made to Mårbacka, Värmland, where Selma Lagerlöf has immortalized, by three decades of creative writing, the Dalecarlian and Värmland spiritual life sublimations among the plain people of these provinces, is but a small tribute to this great soul, who, more than any living writer of the North Land, has flamingly said, "If any man love man, he must of necessity love God." From her first book to her last one, says Hanna Astrup Larsen, "This message of love is the flame she has carried." The Nobel Prize bestowed upon her for contributions to literature is an appropriate recognition of her greatness.

When in a foreign country, there is no privilege more highly esteemed than that of a visit to a private home. We have mentioned elsewhere our great pleasure and profit from an evening spent at the summer home of Professor and Mrs. Key, of Stockholm; also a fine and interesting visit with Professor and Mrs. Robin Fahræus at Uppsala.

In Copenhagen, visits to the home of Professor Oluf Thompson, who is an enthusiastic admirer of modern paintings, and that of Professor Paul Møller,* a connoisseur of fine books, were delightful privileges. It is stimulating to know what prominent members of one's own specialty "live by" and find expressive of their sublimations.

An unforgettable evening was spent at the home of Sven Hedin, the most famous of all Asiatic explorers. In America, he was in charge of the erection of the Chinese "Golden Temple" at the last Chicago World's Fair. The entrance to Hedin's residence in Stockholm, on Lake Mälaren, is by a hall which has at its right a mural painting of the map of Asia, on which are traced in red the pathfinding routes of his explorations. On the left is a mural of the "Temple." Upstairs, occupying one floor,

are the living rooms of Sven Hedin and his devoted sister, Alma Hedin. The next floor above the living quarters is the wonderful library and work shop of the most prolific writer we have known. Fifteen sections of book shelves hold the bound volumes of Hedin's own writings. Over 4,000 carefully filed field sketches were on the library shelves. In one room, we examined personal communications from celebrities of many countries; among these were letters from Theodore Roosevelt, Franklin D. Roosevelt, Kaiser Wilhelm, Lord Curzon, Von Hindenburg, Lord Kitchener, and many others of great renown. On Sven Hedin's desk was the manuscript of a book he said must be finished by Christmas. He writes rapidly but carefully; only the left half of the sheet is written upon in ink. Asked if he rewrote his text, he answered, "Seldom," but added, "I like to do the proof reading if I have time, but often the editor receives it uncorrected."

At the age of seventy-two, this celebrated author and explorer is very actively at work. His mind is keen, alert, and is driving his genius for hard labor at a pace few younger men could follow. Of all creative laborers we have met, he inspires us most.

Alma Hedin, Sven's talented sister and philanthropist, is an author in her own right. "My Brother Sven," "The Flower Fund," and other writings are to her credit. As the founder and aggressive supporter of one of Stockholm's Old Folks' Homes, now with an inmate population of 1,500, she is known as one of the city's noble women.

At Lidingö, on the high and rocky heights of a channel (Saltsjön) of the Baltic Sea, directly across from Stockholm, is the artistic home of Carl Milles, Sweden's greatest sculptor. In the garden are seen many of his original creations in appropriate settings. In the house are some notable collections of ancient sculpture and a fine old library. One entire morning was not too long in this treasure home. The sister of Carl Milles was a gracious hostess and an obliging guide during our visit here.

This last summer, President Angell, of Yale University, conferred upon Carl Milles the degree of Doctor of Humane Letters, calling him "heir in your own right to the tradition of the grand style, bold and suc-

*ø used in Danish language.

cessful innovator, wedding majesty with beauty as few since Buonarrotti have known to do."

Hospitalization of Patients in Sweden

Historically, the welfare of the sick in the Middle Ages was mainly called a Christian work of charity, because of its control by the church and private benevolent societies. At this time no real differences existed between the care of the poor and that of the sick. Institutions were found generally in connection with churches and convents. At the time of the Reformation in Scandinavia, convents were closed and church property was confiscated by the state, and it then became the duty of the state in the middle of the 17th century to provide a reorganization of the hospitals.

In 1700, the University of Uppsala set up an out-patient department for the training of students. This was probably one of the first departments of its kind organized in any medical high school. During the eighteenth century a successful reform work was carried on, pertaining to hygiene and health. Provincial hospitals, called Lasarets (after Lazarus in the Bible), were organized and some twenty of such hospitals were taken over by local hospitals and in turn given into the care of county councils. The county council, or the landsting, seems to have been an organization peculiar to that country at that time, and the greatest work of these councils concerned hygiene and health, and two-thirds of the expenses of these organizations was devoted specifically to this part of their work. The money utilized was collected from state taxes.

The duties of these county councils involved the organization of institutions for the feeble-minded and their education and training; also they were obliged to arrange for the training of deaf-mute and blind children within their districts. The care of the insane was organized in a somewhat different way by the state under what was called "the state medical board," but it was found later that the county councils were obliged to give aid to this work.

The term "hospital" in Sweden is more strictly limited to institutions having the care of the mentally afflicted, while the Lasarett is an institution which came into existence about the year 1740 as a necessity in caring for a large number of venereal dis-

eases which prevailed at that time at the close of the great wars.

Certain divisions of care of the sick are designated by the term (1) Institution for the treatment of mental defectives and epileptics, (2) general hospitals and cottage hospitals, (3) sanatoria, (4) hospitals for the feeble-minded, (5) hospitals for chronic diseases, (6) cripples' homes, and (7) institutions for radiological treatment of diseases.

The first type of institution is cared for by (a) state, (b) county councils and county bureaus, (c) societies or foundations, and (d) private persons. The state has mental hospitals, reformatories and institutions for the treatment of the blind and the deaf. The county council, separate councils and bureaus, separately or jointly with other councils, are responsible for the reformatories, homes for the feeble-minded, labor homes, and asylums for uneducatable and uncultivable idiots.

Societies or private persons care for minor institutions for uneducatable idiots, and also some schools and labor homes. General hospitals and cottage hospitals of the six largest cities are cared for by their county councils. In these hospitals care is largely given to chronic diseases. The term "hospital" as a rule is changed to Lasarett when the accommodation exceeds thirty. If below thirty, the term "cottage hospital" is used.

At various hospitals maternity sections have been established, but in the two largest cities, Stockholm and Gothenburg, there are large separate maternity hospitals. There are also some minor and independent maternity institutions apart from hospitals.

Orthopedic treatment is largely given at the so-called "cripples' homes." Sanatoria were first formed by a grant from King Oscar II of 2,200,000 Kronor presented to him by the Swedish people in 1897. With this money, four public sanatoria were erected for the care of lung tuberculosis, all managed by a supervisory board appointed by the government. In addition to this group, a great number of sanatoria have been built in all parts of the country and most of them are owned and managed by county councils.

Hospitals for the Feeble-minded.—The treatment in these institutions is free of charge unless a private room is occupied. In order to obtain a government grant, the hos-

pital for the feeble-minded must be approved by the State Medical Board. Towards the maintenance of these hospitals an annual government grant is given varying with the number of beds and cases.

Hospitals for Chronic Diseases.—Cases of chronic diseases are admitted to ordinary hospitals or cottage hospitals only if it is deemed the treatment given will yield essential improvement. State grants are given towards the erection of such hospitals and for such treatment and for the maintenance of these institutions. The control of such institutions is by the medical board of the state, which likewise controls the medical and nursing staff and their training.

Cripples' Homes.—These institutions or special orthopedic hospitals, as they are sometimes called, are partly out-patient departments and clinics, and they are attached to the state-aided cripples' homes. These institutions are supplemented by special orthopedic departments which aid cripples in making a living. These special institutions are owned by private societies and receive ample means for their maintenance from public funds. Charges at the cripples' homes for persons without means or small means are partly paid for by the state and county councils; the rest is paid for by the patient or by the municipality to which the patient belongs.

Radiological Institutions.—Irradiation therapy has now been organized for thirty years and is practically entirely centered in the general hospitals. Over the whole of Sweden, hospital authorities have taken over the cost of radiological treatment of poor patients or those in less favored circumstances, also contributing as a rule to the treatment of those better off. The radiological departments in all larger hospitals are organized as central institutions.

The Cancer Society in 1910 opened what is known as Radiumhemmet as a special radiotherapeutic hospital. This center is now developed into the central institution for the whole country.

In 1928 a Jubilee Fund, in honor of Gustav V, received contributions from all parts of the country, and a large part of this fund was given by the king to further the work of combating cancer.

A special visit was paid to one of Sweden's Provincial Hospitals at Vesterås. Here excellent service is being given by a

group of well trained physicians and surgeons working under the Swedish system of medical social service.

Socialism

In Sweden's last election campaign, September, 1936, the chief issue seemed to be "liberty" in business, as against more government interference as an umpire or even rival. The conservatives demanded "private ownership of property, free enterprise and protection against the socialistic tax drain which will, they claim, cause the source of all economic progress, the formation of private capital, to dry up." The Social-Democrats, on the other hand, insist on a continuation of their "social welfare" program. As the farm voters have swung over to the socialists, called a "cow trade," a Farmer-Labor combination is likely to prevail for some time to come—since this party was re-elected.

When consideration is given to the fact that the Labor party has been in power for several years, one can easily conclude that the trend of government has been favorable to the masses; and because the socialists and communists are very critical of each other, a so-called "Middle Way" has been pursued.

Sterling North, in commenting on Child's "Sweden: The Middle Way," has said:—

"That Sweden's Middle Way is more nearly commensurate with human dignity; more certain of promoting life, liberty, and the pursuit of happiness, and less likely to sprout sadistic legions in multicolored shirts than either communism or fascism, is the belief of the intelligent reader who pursues this quietly factual account of a noble experiment." (*Chicago Daily News*)

Denmark

Denmark is justly famous for her Folk Schools and skill in scientific agriculture.

Folk Schools

Sir Michael Sadler, Master of University College, Oxford, has said, "The farmers of Denmark have won the admiration of the world by the intellectual and moral power which they have shown in their successful achievement of many-sided coöperation. They are forward-looking, cheerful, scientifically minded, and resourceful."

What Arnold of Rugby did for England the Christian radical, Bishop N. S. F. Grundtvig (1783-1872), pastor, poet, historian, and educational reformer, did for Denmark. He, with his chief disciple, Kristen Kold (1816-1870), founded "The Peo-

ple's High Schools" which gave the essence of a liberal education to farmers' sons and daughters and worked a miracle of culture in the Danish country-side. Corporate life in an atmosphere of liberal education gave practical culture.

The Folk high schools are voluntary and are for rich and poor, town and country, but particularly for industrial workers and farmers. There are twenty normal schools in Denmark attended by approximately 2,000 pupil teachers.

As a rule the Folk schools have a five-month winter course for young men and a three-month summer course for young women. About one-third of the agricultural youth of the country have taken a course at the Folk high schools and the agricultural schools during the past thirty years. The reputation of having the best farmers in the world is held by Denmark, and this is undoubtedly due to the popular Folk school educational program. This, again, may account for the overwhelming majority of Danish farms being owned by the farmers themselves, there being less than 7% leased or tenanted. These farms, from the largest to the smallest, are organized in coöperative societies and establishments that stretch over sales and purchases and every branch of production in agriculture. The coöperative dairies, for example, have made it possible for the small farms to dispose of their comparatively small output of milk at the same price as that obtained by the large farms.

Practically one-third of the people in Denmark earn their living by handicrafts or industry, chief among which are preparation of food stuffs, clothing, earth works and building, wooden goods and metal goods. Denmark is especially noted for its porcelain and silver technical products.

Educational Foundations

Denmark has three great Foundations—the Carlsberg, Rask-Ørsted and Mönsted. The first two are devoted to liberal arts and science and the last to commercial and economic activities. Beer produced the money for the first and margarine for the last Foundation.

Universities

There are two universities in Denmark, one in Copenhagen and one in Aarhus; the latter was started experimentally in 1928.

It now has a 1000-bed hospital and a 350,000 volume library. The University of Copenhagen was founded in 1479 and is a state institution, but is largely self-governing and self-supporting. About twenty professors are elected as a Consistorium and with the Chancellor (Rector Magnificus) elected for eight years, constitute the governing body. The students elect a Students' Council which with similar bodies from other educational establishments elect the Danish Students' National Council to represent all Danish students.

Approximately 5,500 students are matriculated at Copenhagen, and of these 1,000 are women.

There is no fixed time for the duration of the courses and the student can take examinations when he thinks he is ready. The minimum, however, is usually five to seven years. Doctorate degrees are acquired through scientific treatises which are printed and must be defended in public.

The State College of Engineering, founded in 1829, has the same rating as the University.

There are no less than 303 technical schools with 30,000 students in Denmark.

The Royal Veterinary and Agricultural College was founded in 1773 and now has 700 students.

It has been said that the literacy of any people can be judged by its libraries. Denmark supports about eighty-five public libraries, of which seventy-seven are in rural districts. The total number of books in the libraries is approximately 2,250,000.

The visit to Denmark included attendance at the Fourth International Congress of Cytologists, held in the University Physiological Laboratory of Professor Albert Fischer in Copenhagen, an institution supported liberally by the Rockefeller Foundation.

An interesting feature of the program of the Congress included demonstrations by Dr. Alexis Carrel and Colonel Charles A. Lindbergh of their robot heart. Colonel Lindbergh made repeated demonstrations of the mechanical construction of the apparatus while Dr. Carrel explained the physiological applications and exhibited microscopic slides of heart, thyroid gland, spleen and kidney tissues after subsection to the perfusion experiments.

We were greatly impressed by the pleasing personality of Colonel Lindbergh, and

with the masterful knowledge he had of the mechanical and physiological principles utilized in the construction and operation of this very wonderful apparatus. Quite contrary to press reports, there was no assembling of curiosity mongers at this conference. At the entrance gate of the institute not a single interlocutor could be seen. The report given by the press was a pure figment of imagination.

All who visit Denmark should see Elsinor (Hamlet's) Castle at Elsinor, approximately seventy miles from Copenhagen at the Narrows of Öresund. Here is an interesting old castle where Shakespeare is said to have found the material for his "Hamlet." The auto trip from Copenhagen is through beautiful country beside the narrow arm of the Baltic Sea. Viewed from a boat on the sound at sunset, the castle with its verdigris roof, is a sight of unforgettable charm and beauty.

Collectivism in Scandinavia

Very few countries have progressed further in the direction of social security than those of Scandinavia. This progression is because of historical determinants. Capitalism reached the peak of its development earlier in Scandinavia than in the United States and collectivism is developing faster in Scandinavia, as is also the so-called lower class consciousness.

The various forms of social insurance are all to be found in Scandinavia, though not all in each of the countries. There is hardly any stage of life which is not now covered by some kind of pension or insurance.

The lack of private resources with which to pay physicians is said to have resulted in the appointment of public physicians. In Sweden public hospitals now have more than three-fourths of the beds and public funds very largely support the private hospitals. The result is that private hospitals and private physicians are forced to keep their rates down somewhere near the level charged by public physicians and public hospitals. Today in each of the Scandinavian countries millions of dollars are paid out every year in sickness insurance.

Voluntary unemployment insurance prevails in Norway, Denmark and Sweden, but it was quite inadequate to cope with unemployment during 1921 to 1924 and 1930 to 1935.

Old age pensions are effective in Denmark and Sweden but not in Norway because of inadequate finances.

K. K. Steincke (Minister of Justice) in discussing "The Social Reform Law in Denmark" says that there are four principal laws, the Unemployment Insurance, Accident Insurance, National Insurance, and Poor Relief Laws. The system of National Insurance has proved very popular—the insured constitute over 80 per cent of the population over fifteen years of age. Old age annuity is paid to 45 per cent of those over sixty-five years. Disability annuity is paid to 31,000. The Poor Relief Law deals with all aid given outside of the insurance system. Social Reform in Denmark costs about 11 per cent of the national income, 73 per cent being paid by the state and municipalities, 23 per cent by the insured and 4 per cent by employers. The permanency of this social reform depends upon having a low rate of unemployment.

In Sweden, the profits from public ownership by the state, not municipal enterprises, were double the interest on the national debt in 1931.

Writers in Scandinavia, like Manfred Björkqvist, are arising to say "collectivism, too, has its fateful risks," and to ask, "What kind of fellowship can be developed by people who have fled from themselves in order to lose themselves in the group, but thereby we solve neither our own problems or those of the group as a whole? The greater the paucity of personalities within a group, the more impoverished is the spirit of the group."

Return Voyage

The Swedish-American Line kindly extended and transferred our tickets to the Polish, Gdynia American Line and we returned on the S.S. Kosciuszko, named after the general and Polish hero who assisted us in our war of independence. We were given the best accommodations on the boat, and at the dining table our associates were Captain Edward Pacewicz, of Gdynia, Poland, Chief Officer of the boat, and Zdzislaw Kubikowski, Symphony Orchestra Director, who was returning to America after completing a two-year scholarship at Cracow University.

Under what is known as the Kosciuszko Foundation of New York, a number of

splendid young Polish-American students have been enabled to attend the old and famous universities of Warsaw and Cracow. Here fine opportunities were available for study in the arts of music and painting and also in the science of medicine. We were impressed by the fine words of praise given by the Polish-American students for the home of their ancestors and the national efforts now being made to overcome the economic difficulties prevailing.

The finest comradeship is readily available among people of all nations when equal educational and financial privileges obtain. Through the courtesy of the officers of the Kosciuszko we were presented with a hand made set of flags representing Norway, Sweden, Denmark, Poland and the United States of America.

Bibliography

- Almquist and Wiksells: Sweden. Stockholm, 1936. (Edited and published with the assistance of public authorities.)
 American-Scandinavian Review, 23:42, (March) 1935; 24:39, 48, 68, (March) 1936; 24:165, (June) 1936; 24:265, (Sept.) 1936.
 Anderson, D. A.: The School System of Norway. Univ. of Iowa, 1912.
 Begtrup, H., Lund, Hans, and Manniche, P. (of Folk High Schools, Denmark): The Folk High Schools of Denmark, and The Development of a Farming Community, 1926.
 Danish Statistical Department: Denmark. Published by the Royal Danish Ministry for Foreign Affairs and the Danish Statistical Department, 1934.
 Egan, M. F.: Denmark and the Danes (with 39 illustrations). Nat'l Geograph. Mag. (August) 1922.
 Knight, E. W., Professor of Education, Univ. of North Carolina: Among the Danes. 1927.
 Larsson, B. Hjalmar: Six centuries of medical progress in Sweden. Jour. Mich. State Med. Soc., (Sept.) 1933.
 Larsson, B. Hjalmar: Medical practice in Sweden. Jour. Mich. State Med. Soc., (Feb.) 1936.
 Olson, A. L.: Sweden, Land of White Birch and White Coal (with 51 illustrations). Nat'l Geograph. Mag., (October) 1928.
 Posse-Brâzdová, A.: Country house life in Sweden (with 52 illustrations). Nat'l Geograph. Mag. (July) 1934.
 Sten, J. W. B.: Unknown Sweden. M. J. I., 2nd edition, 1927.
 Stomberg, Professor A. A.: A History of Sweden. Univ. of Minn., 1931.

THE TREATMENT OF ACUTE DIARRHEAL DISORDERS OF INFANCY AND EARLY CHILDHOOD WITH BANANA AND BANANA POWDER*

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This paper presents the *clinical aspects only* of the banana therapy in the treatment of fifty-six cases of acute diarrheal disorders. No attempt is made to analyze the mode of action of the banana diet, nor to enter into any exposition of the chemical or the physiological phenomena therein involved. The conclusions drawn are based solely on the clinical results.

Twenty-four control cases were treated with well-recognized methods of therapy.

The fifty-six cases were seen either in the wards or in the out-patient department of The Children's Hospital of Philadelphia from July 1, 1935, through November 1935. They ranged in age from three weeks to seven years, the greater number being under two years of age. As will be seen from Tables I, II, and III, several types of infection were present, with temperatures ranging from ninety-eight degrees F. to one hundred and four degrees F. per rectum, and with histories of from one to fourteen days illness prior to the treatment. The general picture is that of the usual "run of the mill" diarrheas of infancy and early childhood, occurring during the summer and early fall.

The following tables show the detailed

results with bananas, banana powder, and the twenty-four control cases treated with recognized standard methods during the same period of time.

The treatment was administered as follows:

First forty-eight hours:

Materials used:

1. Crushed (or mashed), ripe banana (yellow flecked with brown).
2. Banana powder.
3. Boiled water.

Amount used:

1. One-third banana per pound of body weight per twenty-four hours (or):
2. One tablespoonful of banana powder per pound of body weight per twenty-four hours.
3. Boiled water ad lib.

When given:

1. Every two hours, during the twelve hours of the day.
2. Every four hours, during the night, which really means only two feedings at night, as: 10:00 P.M. and 2 A.M.
3. The two night feedings are twice the amount given in the day feeding.

*From the Children's Hospital, Philadelphia, Pennsylvania. Thesis submitted to the faculty of the Graduate School of Medicine of the University of Pennsylvania, in partial fulfillment of the requirements for the degree of Master of Medical Science (M.Sc. (Med.)) for graduate work in pediatrics.

†Dr. Brubaker graduated M.S.P.H., University of Michigan; M.D., Detroit College of Medicine, 1930. For five years he practiced in Mason, Michigan. He was Resident in Pediatrics, Children's Hospital, Philadelphia, 1935-1936. He took a postgraduate course in Pediatrics at the University of Pennsylvania, where he received the degree M.Sc. (Ped.).

ACUTE DIARRHEAL DISORDERS—BRUBAKER

TABLE I

INFECTION: N for none E for enteric P for parenteral U for unknown						Stools previous to the treatment				B -Bananas BP-Banana powder			RESULTS		
Days of Diarrhea Before Treatment		Outpatient Ward		-O -W		N U M B E R	M U C U S	B L O O D	W A T E R Y		Number of stools after Treating for			G good	
Case Num- ber		Admission	Age in Mo.								Temper- ature	24 hrs.	48 hrs.	96 hrs.	F fair
															P poor
1	2	15	99.2r	O	N	22	xx		xx	B	7	4	2	G	
2	2	19	99 r	O	N	5	xx		x	B	3	2	2	G	
3	3	12	99.8r	O	P	6	x		xx	B	5	3	3	F	
4	3	7 yr.	98.6m	O	N	6-7	xx		xxx	B	3	2	2	G	
5	2	5 yr.	100 r	O	P	6-7	xx		xx	B	2	1	0	G	
6	2	16	100 r	O	P	15	xx		xxx	B	8	6	3	G	
7	14	11	99 r	O	N	6-9	xx		xx	B	4	5	4	F	
8	2	10	102 r	O	P	10	x		xxx	B	3	3	3	G	
9	2	15	99.4r	O	P	7-8	xx		xx	B	5	4	3	G	
10	2	2 yr.	99.4r	O	N	8	xx		xx	B	5	4	5	F	
11	7	30	99.8r	O	N	5-6	xx		xx	B	6	2	3	G	
12	2	18	101 r	O	N	8-9	x		xxx	B	3	2	2	G	
13	3	24	99.8r	O	N	5-6	xx		xx	B	4	2	2	G	
14	2	27	100 r	O	E	5-6	xx		xxx	B	4	1	2	G	
15	½	36	101 r	O	E	5	x		xx	B	4	2	2	G	
16	14	24	98.4r	O	N	4-5	xx		xx	B	3	1	2	G	
17	3	30	101 r	O	P	5-6	x		xxx	B	4	3	2	G	
18	5	11	101.4r	O	P	6-7	x		xxx	B	4	2	2	G	
19	2	9	99.6r	O	P	5-6	xx		xxx	B	2	3	2	G	
20	1	5 yr.	99.2r	O	N	6	x		xx	B	4	2	2	G	
21	1	2	100 r	O	E	5	x		xx	B	3	1	1	G	
22	2	5	99.8r	O	P	5-6	xx		xx	B	3	2	2	G	
23	2	8	99.6r	O	P	4-6	x		xx	B	1	2	2	G	
24	7	5	99.6r	O	P	5-6	xx		xx	B	1	1	2	G	
25	4	4	100½r	O	N	7-8	xx		xx	B	4	3	2	F	
26	3	5	99.6r	O	N	5-6	x		xx	B	3	2	1	G	
27	7	2½	99.8r	O	N	13	xx		xxx	B	5	5	3	G	
28	7	2½	98 r	O	N	5-6	xx		x	B	4	3	3	F	
29	2	4½	101 r	O	P	6-7	xx		xxx	B	2	3	2	G	
30	8	1¾	101¾r	O	P	5	xx		xx	B	4	4	3	F	

x is moderate. xx is moderately heavy. xxx is heavy.

TABLE II

INFECTION: N for none E for enteric P for parenteral U for unknown						Stools previous to the treatment				B -bananas BP-banana powder				RESULTS
Days of Diarrhea Before Treatment		Outpatient Ward		-O -W		N U M B E R	M U C U S	B L O O D	W A T E R Y		Number of stools after Treating for:			G good
Case Num- ber		Admission	Age in Mo.	Temper- ature							24 hrs.	48 hrs.	96 hrs.	F fair
														P poor
31	2	6	99.4r	O	N	7-8	xx		xx	B	5	4	5	P
32	2	2¾	99.5r	O	P	5-6	xx		xx	B	5	3	4	P
33	14	6	99.8r	O	N	5-6	xx		xx	B	3	2	2	G
34	2	4	99.8r	O	N	4-5	xx		x	B	3	2	1	G
35	7	2¾	99.8r	O	N	12	xx		xxx	B	3	3	2	G
36	3	4	99.8r	O	N	5-6	xx		xx	B	3	2	2	G
37	1	13	99.8r	O	N	3	xx		x	BP	2	5	2	F
38	5	9	101 r	W	E	5	xx		xx	BP	5	3	2	G
39	1	10	99.8r	W	N	7	xx		xxx	BP	7	4	4	F
40	1	12	99 r	W	P	4	xx		x	BP	4	3	2	G
41	2	16	103½r	W	P	5-7	xx		xx	BP	4	3	2	G
42	3	6	101 r	W	P	6-7	x		xx	BP	4	2	3	G
43	3	2	98.6r	W	N	5	xx		xx	BP	3	2	2	G
44	3	3	98.6r	W	N	7	x		xx	BP	1	2	2	G
45	2	2	99.8r	O	N	13	xx		xxx	BP	6	4	3	F
46	7	7	101 r	W	E		xx	x	xxx	BP	5	4	3	F
47	7	2	99.4r	W	N	6-7	xx		xxx	BP	5	5	5	P (D)*
48	1	3	101 r	W	P	10	x		xxx	BP	9	4	7	P
49	1	3½	100 r	W	N	6	x		x	BP	4	3	4	F
50	5	8	101¼r	W	N	17	x		xxx	BP	17	10	16	P
51	1	¾	99.8r	W	N	4	x		xx	BP	4	4	3	P
52	7	8	98.6r	W	N	7-8	xx		xxx	BP	6	5	2	F
53	2	3	99 r	W	N	6-9	xx		xxx	BP	2	4	0	G
54	4	5	99.8r	W	P	9	xx		xxx	BP	5	3	8	P (D)*
55	1	¾	99.4r	W	E	9	xx		xxx	BP	9	6	5	F
56	1	¾	100 r	W	N	6	x		x	BP	5	2	4	F

x is moderate. xx is moderately heavy. xxx is heavy. (D)* died about three weeks after discontinuing the treatment.

ACUTE DIARRHEAL DISORDERS—BRUBAKER

TABLE III. CONTROLS

INFECTION: N for none E for enteric P for parenteral U for unknown						Stools previous to the treatment				ST for accepted standard treatment			RESULTS	
Days of Diarrhea Before Treatment		Outpatient -O Ward -W				N U M B E R	M U C U S	B L O O D	W A T E R Y		Number of stools after Treating for:			G good
		Admission	Temper- ature								24 hrs.	48 hrs.	96 hrs.	F fair
Case Num- ber		Age in Mo.												
1	1	9	100r	W	P	5-6	xx		xx	ST	2	4	4	F
2	2	¾	100r	W	P	5-7	xx		xx	ST	5	7	8	P
3	3	½	102r	W	P	8	xx		xxx	ST	6	9	Died	P
4	4	10	102r	W	E	14	x		xxx	ST	5	3	2	G
5	2	8	100r	W	P	14	xx		xxx	ST	4	1	2	G
6	7	1½	102r	W	P	6-8	x		xxx	ST	13	3	5	F
7	2	2	99r	W	N	6-7	x	x	xx	ST	4	3	3	G
8	14	9	100½r	W	P	M	x	x	xx	ST	6	7	4	F
9	4	7	103r	W	P	5-6	x		xx	ST	6	6	3	F
10	1	1	101r	W	P	11	x		xxx	ST	10	7	7	P (D)*
11	8	10	99r	W	N	14	x		xxx	ST	3	2	3	G
12	3	5	100r	W	N	10	x		xxx	ST	5	8	16	P
13	1	2¼	102r	W	P	8			xxx	ST	9	16	5	F
14	1	36	104r	W	P	4	x		xx	ST	16	2	3	G
15	3	30	103r	W	P	5	xx	x	xx	ST	5	3	2	G
16	1	32	100r	W	N	4	x		x	ST	1	1	2	G
17	7	18	100r	W	N	M	x		xxx	ST	2	5	5	F
18	1	16	99r	W	E	12	xx	x	xx	ST	2	5	5	F
19	21	30	101r	W	P	14	x		xxx	ST	3	4	1	G
20	1	18	104r	W	N	6	x		xx	ST	2	2	1	G
21	2	5	100r	W	P	7	x		xx	ST	6	6	6	P
22	7	¾	100r	W	E	5	x		xx	ST	3	1	6	P (D)*
23	7	2	99r	W	P	7-9	xx		xx	ST	5	5	7	P
24	3	3	101r	W	P	4-5	x		xx	ST	5	6	3	P

M—means many or numerous stools, number not known. ST—means standard treatment of orange juice mixture for twelve hours followed with some form of protein milk. x—is moderate. xx—is moderately heavy. xxx—is heavy in amount. (D)*—these patients died within the four to seven day period after admission to the hospital.

Example: An infant weighing eighteen pounds.

1. Daily requirement of crushed ripe banana would be six bananas (may be whipped with water to make liquid).
2. One-half banana every two hours during day.
3. One banana for each of the two feedings at night.
4. Using banana powder the requirement would be eighteen tablespoonfuls.
5. Dissolve or mix this amount of powder in thirty-three ounces of boiled water.
6. Give three ounces of above every two hours during the day, and six ounces at the two night feedings.
7. This treatment to be repeated for the next twenty-four hours; nothing else orally, except boiled water, for the first forty-eight hours.

The second forty-eight hours of treatment (transition diet):

In infants still on bottle formula:

1. Use skim milk in place of whole milk in original formula, one and one-half ounces per pound of body per twenty-four. May add casein.
2. Use banana powder so as to have seven and one-half per cent in the formula.
3. Feed regular hours as before treatment.
4. I have advised babies on breast feedings being taken off the breast the first forty-eight hours only.
5. May have boiled water between feedings at lib.

In the older infants and children the following transition diet was suggested to choose from:

Breakfast

Cooked cereal, with water in severe cases, or skim milk in the milder diarrheas.
Cocoa made with water or skim milk.
Toast.
Use very little if any sugar.
Cottage cheese.

Dinner

Potato, rice, or barley gruels.
Toast.
Few crisp soda crackers.

Afternoon

Weak tea or orange juice and toast.

Supper

Cereal with skim milk in mild cases.
Toast.
Banana.
Cocoa with water or skim milk in milder cases.

After the above, start on the regular diet. If the diarrhea is not checked, or starts again, go back to the banana or banana powder treatment.

Observations

The stools of those infants from two to eighteen months of age, who were on the banana therapy, were watery or mucous, and dark green to gray at the end of twenty-four hours. After the second day they were a lighter gray to a light yellow, and on the third to fourth day they were fairly soft and normal yellow in color. In no case were the stools in hard masses after the patients were on the banana therapy treatment for two days.

Banana and Banana Powder were given to eight or nine normal infants; and there was no evidence of constipation or diarrhea. Several cases which had just a slight looseness of stools were corrected in two to three days when put on the banana or banana powder.

One case of marasmus, in which the ordinary sugars cause diarrhea when given in required amounts in the formula, was put on banana powder with twice the number of calories required without causing diarrhea.

As an experiment in sugar tolerance under the banana powder, one child who was normal except for an internal hydrocephalus with an obviously fatal prognosis, was given approximately one hundred calories per pound of body weight, or three times the estimated amount given in our cases on banana therapy, for forty-eight hours. Not only was there no evidence of glycosuria, but the child showed no diarrhea nor constipation. One isolated case like this cannot be taken as a generalization, but it is interesting to note that this infant had a sugar tolerance considerably above the sugar-content of the amount of banana powder used in the treatment of diarrhea in my series of cases.

Mortality

There were no immediate deaths following the use of banana or banana powder therapy in the treatment of the diarrhea. Two deaths occurred about three weeks after discontinuing this form of treatment. These were of very severe marasmic infants who developed diarrhea following parental infections. Their prognosis was very poor, and every means of treatment was used without avail. They were transfused with whole blood, given clysis, continuous intravenous fluids, and medications, resulting in the prolongation of their life, but in eventual death.

In the control group there were three deaths, which occurred within two to five days after start of treatment. These cases were all one month and under in age, and were given intravenous blood and fluids.

One may conclude from the above that there is no one specific form of treatment for all cases, and that younger age groups carry a heavier mortality no matter what treatment is prescribed.

Interpretation of Results

Results were recorded as good, fair, and poor, and were based *first* on the relation between the initial severity of the attacks and the specific improvement after ninety-six hours of treatment; and *second* on the length of time that elapsed between the start of the treatment and the resumption of regular and normal bowel movements. For example:

Case A.—Upon admission the patient had been having ten stools daily. At the end of forty-eight hours the number had dropped to five, but they were still watery; after ninety-six hours this number was reduced to three; but as the stools were still abnormal in character, the results were classified as only fair.

Case B.—This patient, also with ten stools daily at the start of treatment, had nine stools at the end of twenty-four hours, and five at the end of forty-eight hours; and after ninety-six hours had reverted to seven stools of abnormal character and appearance daily. This was recorded as poor.

Case C.—The number of stools starting with thirteen daily before treatment was instituted, had dropped to five at the end of the twenty-four and forty-eight hour periods respectively; and to but three stools of normal appearance at the end of ninety-six hours. This result was recorded as good.

All the patients treated were examined at the start of treatment, and at the end of one day, two days, four days, and seven days respectively after the start of therapy, so as to be certain of normal bowel function.

The final results of the treatment are shown in Tables IV, V, VI, and the controls in Table VII.

Tables IV and V show the results with bananas and banana powder respectively.

TABLE IV. BANANA THERAPY

A. Sixteen cases, eight months of age and under.	
Results:	
Good, eleven cases.....	69%
Fair, three cases.....	19%
Poor, two cases.....	12%
B. Twenty cases, nine months of age and over.	
Results:	
Good, seventeen cases.....	85%
Fair, three cases.....	15%
Poor, none.	

TABLE V. BANANA POWDER THERAPY

A. Fifteen cases, eight months of age and under.	
Results:	
Good, four cases	27%
Fair, six cases.....	40%
Poor, five cases.....	33%
B. Five cases, nine months of age and over.	
Results:	
Good, four cases.....	80%
Fair, one case.....	20%
Poor, none.	

Table VI shows the combined results of cases on banana and banana powder.

TABLE VI.

A. Combined cases (36) on banana treatment.	
Results:	
Good, twenty-eight cases.....	78%
Fair, six cases.....	17%
Poor, two cases.....	5%
B. Combined cases (20) on banana powder treatment.	
Results:	
Good, eight cases.....	40%
Fair, seven cases.....	35%
Poor, five cases.....	25%
C. Total combined cases (56) on banana and banana powder therapy.	
Results:	
Good, thirty-six cases.....	64%
Fair, thirteen cases.....	23%
Poor, seven cases.....	13%

Table VII shows the controls, which were on the standard treatment.

TABLE VII.

A. Thirteen cases, eight months of age and under.	
Results:	
Good, three cases.....	23%
Fair, three cases.....	23%
Poor, seven cases.....	54%
B. Eleven cases, nine months of age and over.	
Results:	
Good, seven cases.....	64%
Fair, four cases.....	36%
Poor, none.	
C. Combined control cases (24).	
Results:	
Good, nine cases.....	38%
Fair, seven cases.....	29%
Poor, eight cases.....	33%

RECAPITULATION OF TABLES IV, V, VI, AND VII.

	% Good	% Fair	% Poor
Table IV. Banana Therapy.			
A. Eight months of age and under	69	19	12
B. Nine months of age and over	85	15	0
Table V. Banana Powder Therapy.			
A. Eight months and under..	27	40	33
B. Nine months and over.....	80	20	0
A. Banana therapy	78	17	5
B. Banana powder therapy....	40	35	25
C. Banana and banana powder	64	23	13
Table VII. Controls. Standard Therapy.			
A. Eight months of age and under	23	23	54
B. Nine months of age and over	64	36	0
C. Combined ages	38	29	33

These tables bring out the relationship between the ages of the patients and the results obtained, the greater percentage of success being found in the older group, which had relatively the fewer members. It is especially interesting that a much greater success was had even with the youngest infants with the banana therapy than with the accepted methods of treatment.

The younger infants are the more difficult

patients with whom to get favorable results in intestinal upsets, even under the most favorable conditions possible. In this group—the banana powder therapy versus the controls—we have two groups under identical conditions. Both groups were ward patients concurrently admitted, thereby giving us adequate control in regard to therapy and observation. The banana powder therapy gave thirty-three per cent poor results, while our control cases gave fifty-four per cent poor results for the same age-group (eight months and under). The banana powder therapy gave us twenty-one per cent less poor results than the control group.

In a similarly controlled group as above, but in the age group nine months and over, we had no poor results, but the good results with banana powder were sixteen per cent greater than in the control group.

The banana therapy gave even better results than the banana powder. This group of patients were in our out-patient department and able to be taken care of at home, which does not give one as fair a comparison as do the hospitalized groups, who were more adequately under our control and observation. But with these facts in mind, my study of the out-patient cases on banana pulp therapy leads me to conclude that this treatment is just as efficient, if not more so, than the banana powder therapy.

Conclusions

These two general conclusions may be drawn from these cases:

1. The use of the banana powder or pulp is more efficacious than the well recognized methods of therapy for acute diarrheal disorders occurring in infants and young children.

2. The banana powder or pulp is a safe therapeutic procedure for infants and young children as prescribed in my series of cases.

These results indicate that the banana powder or the banana pulp may receive favorable consideration in the treatment of those intestinal upsets occurring during the summer and fall months in infants and young children. In view of these facts, the banana powder or pulp therapy should prove a useful addition to the physician's armamentarium.

Addendum

Measured Facts About Bananas

Composition of fully ripe bananas (yellow skin flecked with brown).

One Average-size Banana

Weights approximately as purchased:

5½ ounces (150 gms.)

3½ ounces (100 gms.)

Contains (peeled) approximately (100 grams)

	Per Cent (%)
Moisture	75.6
Total Carbohydrate	21.1
Dextrose	4.5%
Levulose	3.5%
Sucrose	11.9%
Total Sugars..	19.9%
Protein	1.3
Fat .....	.6
Crude Fiber .....	.6
Total Ash .....	.8
Important Minerals	
Calcium .....	.0090%
Copper .....	.0002%
Iron .....	.0006%
Phosphorus ..	.0310%

Total Calories 95
100.0%

Vitamins

- A—appreciable source of this vitamin
- B—appreciable source of this vitamin
- C—good source of this vitamin
- D—good source of this vitamin

Banana powder or sugar is essentially the same as the above, except with the water content lowered to three or four per cent. The vitamin contents are preserved intact, according to the manufacturers of these powders. (See Bibliography, Reference 5.)

Selection and Preparation of the Banana Pulp

The method which was advised in preparing the banana pulps is as follows: A ripe banana (yellow flecked with brown) with as few bruises as possible is selected, stripped and any bruised portion cut away, and lightly scraped, so as to remove the fibrous material. Next, one of the following ways for mashing bananas is suggested:

1. Press banana through a wire strainer or potato ricer.
2. Mash with spoon or fork until creamy.
3. Break into a bowl and beat with a rotary beater or electric beater until creamy.
4. Press through a banana creamer.

The resulting pulp is mixed (or given as pulp), with water in the proportion ordered in the several feedings; if given to infants, it may be fed through a nipple with enlarged holes or given as a thick cereal feeding as in the treatment of pyloric spasm.

To avoid any misunderstandings, and to insure that instructions were followed exactly, all directions, including return appointments, were given in writing.

The ease and cheapness with which the bananas could be obtained made this method especially acceptable to the mothers of our out-patients; and they, consequently, coöperated with us exceptionally well.

Bibliography

1. Bauman, T., and Forscher-Boke: Investigations on the therapeutic action of apple and banana diet. *Ztschr. f. Kinderheil.* 56:483-608, (Sept. 11), 1934.
2. Blanchard, Kenneth: Powdered bananas in the feeding of infants and young children. *Nutrition and therapeutics*, Reprint from *Med. Rec.*, (January 1) 1936.
3. Bogert, L. Jean: Dietary uses of the banana in health and disease. Research Department of United Fruit Co., N. Y. C.
4. Eddy, Walter H.: The nutritive value of the banana. Bureau of Publications, Teachers College, Columbia, N. Y. C., 1933.

5. Fruit Dispatch Company: Measured facts about bananas with methods for mashing. Home Economics Department, Fruit Dispatch Company, Pier 3, North River, N. Y. C.
6. Haas, Sydney V., Powdered ripe banana in infant feeding. Arch. Ped., 48: No. 4, (April) 1931.
7. Higgins, Harold L.: The feeding of banana and of squash to infants and children. Amer. Jour. Dis. Child., 46:446, 447, (August) 1933.
8. Kahn, Bernard S.: The effect of banana powder feeding on the fecal flora of infants. Arch. Ped., 50: No. 5, (May), 1933.
9. Pearce, N. O.: The use of banana sugar as the carbohydrate in milk mixtures for well babies. Arch. Ped., 52: No. 5, (May) 1935.
10. Thursfield, H.: The use of banana pulp in the feeding of marasmic infants. Arch. Dis. Childhood, 2: No. 7, (February) 1927.

Physicians and Old Age Pension Taxes Under the Social Security Act*

Preliminary procedures are under way to make effective the old age benefit provisions of the Social Security Act. The regulations that have been promulgated by the Bureau of Internal Revenue looking toward the assembly of the mass of detailed data with respect to the employers and employees from whom the taxes are to be collected are of immediate interest to physicians.

Each person who on November 16 was the employer of one or more persons, subject to the exceptions noted, must have reported that fact prior to November 21 to the postmaster from whose post-office the employer obtained his office or business mail. He must also have made application on form SS-4 for the assignment of a number—an "identification number" to be used for identification purposes in connection with the collection of taxes under the act. Physicians who were employers on the date named were required to comply with this requirement. If they failed to do so they should now communicate with their local postmasters for instructions as to how to proceed to make the delayed application. A physician who became an employer after November 16 must also apply for an identification number within a period of thirty days after the relationship of employer and employee is established. This application, the regulations provide, must be made to the field office of the Social Security Board in the area in which the office of the physician is situated or, in the absence of such field office, to the Social Security Board at Washington, D. C.

Persons who were employees on November 24 are likewise required to obtain numbers, called "account numbers," by filing application on form SS-5, on or before December 5, with the local postmaster. Persons becoming employees after November 24 must also file application for numbers thirty days after the employment begins. While physicians generally

are considered, under the regulations, as independent contractors and consequently not subject to the taxes imposed on employees, if physicians are employed on a full time or part time salary basis they are apparently to be considered as employees. Such physicians must file application for "account numbers" on form SS-5. As employees they are subject to the tax on employees, and their employers must pay the employer's tax with respect to them.

Certain employments do not come within the old age benefit provisions of the Social Security Act. Among the exceptions are agricultural labor, domestic service in a private home, casual labor not in the course of the employer's trade or business, service performed by an individual who has attained the age of 65, service performed in the employ of the United States or of any state or subdivision or instrumentality of either, and service performed in the employ of a corporation, community chest, fund or foundation organized and operated exclusively for religious, charitable, scientific, literary or educational purposes, or for the prevention of cruelty to children or animals, no part of the net earnings of which inures to the benefit of any private shareholder or individual. Physicians who employ only persons embraced within these excepted employments or who are themselves engaged in such excepted services are not required to make application for identification or account numbers.

Employers' and employees' taxes will be collected by means of monthly returns to be filed by employers, who not only must pay to the local collector of internal revenue the tax imposed on employers but also must deduct from the wages of their employees the employee's tax and transmit that also to the collector. The first returns will be due not later than March 1, 1937, covering wages paid for services rendered during the month of January. The regulations that have been promulgated cover in detail the records that must be kept by employers, the method of executing returns, the information they must contain and other matters relating to the tax. Physicians should promptly familiarize themselves with all the requirements, so that as much confusion as possible may be avoided. THE JOURNAL will from time to time offer suggestions to aid physicians in meeting the requirements of the act.

*ED. NOTE: The article appeared as an editorial in the *Journal of the American Medical Association*, November 28th. It contains information and instructions important to every physician, presenting as it does his obligation under the old age pension section of the Social Security Act.

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*"Every man owes some of his time to the up-
 building of the profession to which he belongs."*
 —THEODORE ROOSEVELT.

EDITORIAL

WHY OPPOSE THE BASIC SCIENCE BILL?

DURING the past year we have commented freely upon the Basic Science Bill. There is no conceivable proposed legislation in favor of which so much may be said and so little against. As we have already emphasized, it simply requires that all persons who assay to treat the sick show evidence of a competent knowledge of such basic sciences as anatomy, physiology, pathology, chemistry, bacteriology and hygiene and public health. This surely is an irreducible minimum. Any intelligent layman has a right to expect as much of any practitioner he consults for himself or for his family.

Why should anyone oppose it? It does not interfere with, nor discriminate against, anyone now legally engaged in any of the healing professions. In fact any profession or cult would be helped by raising the standards of its members. The state (which means every voting person in the state) extends the right to practice any profession in it, medicine or law, to certain supposedly qualified persons. The state has a right to expect that all persons granted such right, qualify themselves to practice. This is a matter of public interest and concern. The Basic Science Bill is perhaps the greatest personal health measure that has ever been

proposed, and, from the financial viewpoint, the least expensive. Schools for instruction in the Basic Sciences are already in existence and well equipped for the purpose. No formidable or expensive machinery is necessary to put the bill into operation, once it is made a law of the state.

CRUSADE AGAINST TUBERCULOSIS

A CRUSADE against tuberculosis was announced in the December number of this JOURNAL. It has been very widely proclaimed in a series of articles by Paul de Kruif, well-known author, and Mr. A. M. Smith of the *Detroit News*. No doubt this movement which originated and which is being pressed with great vigor in Wayne County will not stop until the whole state is included in a large campaign on the part of the medical profession to rid the state of this disease. The recognized methods of apprehension of very early tubercular involvement consist of the tuberculin or skin test with an x-ray examination of the positive reactors to the skin test.

An extra responsibility is placed upon the shoulders of the roentgenologist, since, to do this work properly, one requires very wide experience in chest roentgenology. Many examiners will be confronted with patients who are, to all intents and purposes, normal persons. It is an easy thing to make diagnosis of tuberculosis where a considerable portion of the lung is involved, and where the evidence of disease is visible even across the street. It is a different proposition to be able always to apprehend a very early minimal lesion. This can be done in the first place only by the best quality of x-ray films, after they are processed, so as to show the finer lung structure. The fluoroscope will not answer the purpose. The function of the fluoroscope in chest diagnosis is limited to the apprehension of the grosser pathology and of possible pleuritic adhesions or to the examining of respiratory or cardiac movements. In the diagnosis of the lung tuberculosis, its use is very much limited. A number of physicians in various parts of the state have installed fluoroscopes in their offices. It should be emphasized that the fluoroscopic is a very small part of an x-ray examination. Compared with first class films, it is doubtful if the fluoroscope is of

any advantage apart from observing the natural movements of the various thoracic and abdominal viscera. Anyone who attempts to make more out of it than this is deceiving both himself and his patient.

MASS THRIFT

THIS is a new term to many of us. We have always considered thrift a personal matter. Dickens once defined it as follows: "Earn one pound, spend nineteen shillings, eleven pence, thrift; earn one pound, spend one pound and one penny, poverty and misery." Mass thrift so-called has been employed to designate social security, resulting from the contributions from the pay envelopes together with employers' contributions, which is to make up the old age and unemployment insurance, after January 1, 1937. The details have been fully discussed during the past political campaign.

Now that the tumult and the shouting have died away and with them pre-election emotion, it is opportune to study the subject of economic insecurity with as much light and as little heat as possible. We have received a brochure of about eighty pages entitled "The Problem of Economic Insecurity in Michigan" by William Haber, state relief administrator, and Paul L. Stanchfield. The brochure consists of a report to the State Emergency Welfare Relief Commission. We earnestly advise perusal of it, a careful study, in fact, inasmuch as it contains an up-to-date assemblage of statistics on the subject.

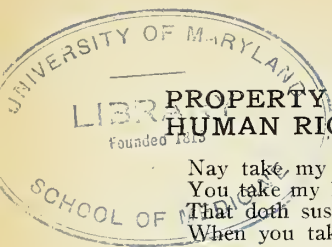
The urbanization of population which has taken place since the early nineties more particularly in Michigan, which has become one of the most highly industrialized states in the union, has made wage earners of thousands who were at one time self-employed on farms and in small businesses. The growth of large competitive industries has greatly increased the insecurity of those who have to work for a living. Old age was at one time not the problem that it is at present. On farms, the aged could always find work suited to their waning physical powers so that they were seldom a burden to their families. Under the industrial regime, there is nothing they can do and at times, owing to the unemployment, their families

are likewise helpless. Many also who had felt themselves secure against the day when they could no longer work, have had their savings swept away or have lost their homes through mortgage or tax foreclosure.

Medical science and preventive medicine have had the effect of enabling thousands to reach old age, who, under conditions which prevailed before the development of medical science, would not have survived, so that we have a larger number of people past middle age than at any other time in history. This, coupled with the fact that competitive industry demands employees with quick reaction time, as well as good physical endurance, has thrown thousands of people in first class physical condition but with slower reaction incident to age, out of employment. These are some of the features that go to produce a permanently unemployed as well as unemployable class. Haber computes this class in Michigan to be over 200,000 families.

Then there is the matter of technical unemployment. In spite of the contention of certain economists, inventions and improvements in machinery deprive thousands of men of a livelihood of whom great numbers go months, sometimes years, before they are properly adjusted to new conditions. Machines have frequently made skilled trades obsolete. All this gives an idea of the problem of insecurity awaiting solution.

We have no doctrinaire scheme for the solution of the problem of economic insecurity. It is one, however, which should engage the attention of every thinking physician, and let us hope that all are in this class. Whatever is done to mitigate the evils of social insecurity, the medical profession have felt that the socialization of medicine would simply add fuel to the burning. The socialization of medicine is not in the experimental stage. It has been tried out in European countries with the result that in those countries where state or socialized medicine prevails the science of medicine has not shown any appreciable advance. The best medical care is to be had in those countries in which the physician is not hampered by regimentation. The peculiarly intimate nature of the practice of medicine is incompatible with methods incidental to socialization.

**PROPERTY RIGHTS VERSUS HUMAN RIGHTS**

Nay take my life and all; pardon not that;
You take my house, when you do take the prop
That doth sustain my house; you take my life,
When you take the means whereby I live.

DURING the discussion of the subject of social security, we have heard much about human rights versus property rights. It is unfortunate that a distinction has been made. Strictly speaking, there is no such thing as property rights. There is, however, a legal recognition of property rights, so-called; what is really meant, however, are rights to property. The mere mention of property signifies ownership and ownership must refer to human beings. Every person has property. That property may be only his clothes or his house or his automobile. The desire to acquire is almost a primal urge with mankind. The protection of property means protection of human rights. People insure themselves in order to protect property rights, which are of course their human rights.

The quotation given above is one that everyone will recognize. The Duke of Venice has pardoned Shylock in his conspiracy against the life of Antonio, but he gives half of Shylock's wealth to Antonio and the other half is to be confiscated by the state. Portia interrupts, suggesting that all of Shylock's property go to the state and none to Antonio. In reply, Shylock gives utterance to the above statement. His attitude is perfectly natural. What is life if there is nothing to sustain it? The words of Shylock possibly represent Shakespeare's personal opinion. We should, therefore, suggest that all rights are human rights.

THE BASIC SCIENCE BILL

WE have commented several times on the desirability of a Basic Science Bill in this state as a forward public health measure. The bill to be presented before the meeting of the legislature has been very carefully drafted and the text is printed in this number of *THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY*. It is hoped that each member will read it carefully.

Now that you have the text of the bill, further comment is unnecessary.

**The
Editor's
Easy
Chair****MEDICINE AND INSECURITY**

A FEW weeks ago at a dinner, a fellow member of the profession said to me that he was sick and tired of hearing so much about medical economics and of having it dished up so frequently in medical journals. If a man attended to his own business and were on the job constantly, and gave his best services, he would have no occasion to worry over the future of medicine—or words to this effect. There are many things that are unpleasant to think about. One of the most disagreeable subjects, that of taxes and taxation, sticks out like the proverbial "sore thumb," so that one cannot help thinking about it. If everything went along like a song, we could perhaps do away with the subject of economics entirely, perhaps not; economic security might be about the worst thing that could happen to us. To quote Browning:

Then welcome each rebuff
That turns earth's smoothness rough,
Each sting that bids nor sit nor stand, but go!
Be our joys three-parts pain
Strive and hold cheap the strain.

However, I wonder if the doctor's attitude towards medical economics explains the name, the *dismal science*, by which economics in general has been known.

* * *

More recently, a panel discussion of economic insecurity, with the emphasis on medical aspects, was held under the auspices of the Economics Committee of the Michigan State Medical Society. Four laymen and four physicians sat around a table and presented their opinions. The whole matter might be briefly summed up thus—the lay members (all college professors) were for the socialization of medicine to meet the requirements of, what one claimed, seventy per cent of the people, any one of whom was unable to withstand a catastrophic illness. The doctors (M.D.'s) all contended that the best medical care obtainable was rendered in the traditional way, namely, by the fee system, whereby individ-

ual members of the profession were stimulated to give of their best to the patient. The relations between physician and patient were intimate and thereby inspired confidence in the physician. Statistics comparing morbidity in countries in which health insurance prevailed, with that in countries in which the utmost freedom of choice of physician prevailed, showed a less amount of sickness in the latter. Health insurance, as one of the lay members of the discussion admitted, could begin with hospital insurance, and if this were found satisfactory, the next move would be to include actual medical care as well as hospital care on the insurance plan. Medical members were opposed to the political control, or regimentation, that, they felt would inevitably follow state medicine. This would hamper them in the treatment of the sick, both in regard to the amount of time as well as the quality of medical care.

Oakland County's method of handling sick indigents was described and considered as near the ideal as possible. The patient called on his physician, who in turn rendered the necessary medical care and presented his bill to the county for payment. This appeared to be satisfactory to the doctor, likewise the patient. One speaker (a sociologist) claimed that the Oakland plan or any other similar plan concerned only indigents. There was a large section of the population, as mentioned, which did not come into the indigent class, which would not be reached by any method similar to that adopted in Oakland County. There was a large small-income group who had to be cared for. There were also the permanently unemployed and unemployable groups, due to technological invention, due to the fact that five or six years unemployment had rendered large numbers incapable of work, and, thirdly, due to the fact that the upper employment age had been practically fixed at forty-five years. This meant a permanently unemployed population in the state equal to the total population of such a city as Grand Rapids. The entire United States had become urbanized and Michigan at a much more rapid rate than most of the other states in the union. This meant that thousands were under the shadow of economic insecurity. The social worker had concerned himself with this class. Some of the physician speakers felt that there was

room for coöperation between the social worker and the physician though the physician opposed regimentation by any group. On the lay side, it was brought out that in the diagnosis and treatment of the sick the physician would be supreme; that there was no probability of interfering with him in his strictly professional capacity. However, there was also an economic phase to the existence of both physician and patient. Both were workers, the patient dealing with material things in order to earn a livelihood, and the physician concerned with the patient for similar reasons, whether he placed the patient first or the livelihood first.

* * *

When laymen discuss things medical, they can be quite radical inasmuch as they have not much to lose or gain by the changes they advocate. We can experiment with the other fellow's calling. An adverse result doesn't affect the experimenter much. We can, therefore, speak in a more or less detached way about the other man's profession or business. Here is the patient with a small income. Here is the doctor. How can we get them together? The socially-minded would have the state step in and pay the patient's bill where the patient felt he could not pay it himself. The doctor, on the other hand, has fulfilled certain requirements in the way of education and training and has, therefore, acquired property rights in his profession. It is his way of making a living. If the state paid the bill or even if some other insurance scheme came good for it, we would have control of medicine by lay groups. He who pays the fiddler calls the tune. The doctor may be too close to the subject to see it in true perspective or in its proper relations. I would not agree, however, to this last, believing as I do that the more intimate knowledge one has should tend to better qualification. The doctor's relations to the people who are ill are certainly more intimate than those of any other class. He feels that he has done and is doing as much as is humanly possible to meet the solution. His success is attested by the fact that the morbidity is no greater in this (perhaps less) than in any state or country in which socialized medicine prevails.

* * *

One speaker (lay) noted the attitude of the profession to adhere to the fee system

and remarked that there was a tendency in all professions to be conservative; the term profession implied a body of knowledge and customs from which its devotees were loath to depart.

The writer feels that, even realizing the condition of economic insecurity that prevails, there is no reason for undue haste. We are in the process of emerging from one of the worst depressions in human history. To quote Walter Lippmann*:

"Depression and war are the two great magnifiers of power of the state: they have bred and sustained all the dictatorships which now perturb mankind and all planned and regimented economics which have been tried out elsewhere. Prosperity and peace, on the other hand, reduce the rôle of the state, because they provide conditions under which the individuals can work out their own salvation successfully."

Such being true, and there is every evidence that it is a fact, let us adopt the Fabian policy of waiting, at the same time continuing to render the best quality of medical service. Once prosperity returns and a great adjustment takes place, there will not be the call for socialization.

The more self-employed persons, whether physicians, dentists, mechanics or truck-gardeners, the more contentment reigns in the land and, axiomatically, the greater the sense of security.

Fracture of Neck of Femur

F. J. Gaenslen, Milwaukee (*Journal A. M. A.*, July 11, 1936), believes that while encouraging reports of internal fixation of fractures of the neck of the femur are at hand from many authors, each developing his own technic, not enough time has elapsed to permit one to speak of end-results. It appears likely, however, that end-results will be reached earlier in those cases in which internal rather than external fixation is used, since conditions established by internal fixation are more or less comparable to those obtaining in the impacted cases. Complications and mishaps may be expected in any new procedure, and indeed many have been reported; but each such incident has been a lesson, often pointing the way to avoidance of danger. No one method of reduction will fit all cases; also not all cases properly reduced and properly spiked will go on to solid union. However, there is sufficient evidence, clinical and experimental, that internal fixation has decided advantages over external fixation and that present day conventional methods, while representing a distinct advance as compared with earlier methods, will give way to more precise and more certain procedures. The author hopes that, first, the method of reduction of fractures of the neck of the femur by traction in flexion and, secondly, the method of internal fixation will be placed on a sound basis.

*Lippmann, Walter: Issues before the Next Administration. The Yale Review, Winter, 1936-37.

THE JUDICIARY LOOKS AT MEDICINE*

By HONORABLE FRANK L. McAVINCHEY
Flint, Michigan

I have been very much interested this morning in listening to the various addresses and I was particularly interested in noting that Dr. Reeder, the old pinochle player, introduced me as Chairman of the Legislative Committee of the Michigan Association of Probate Judges. They put that job on me for this coming year after I had been chairman of the Grievance Committee of the Probate Judges' Association for last year, and I will leave it to Dr. Henry Cook and to Dr. Fernald Foster and the rest of them if it wasn't a Grievance Committee. It was all grief—grief with the Medical Society and grief with the Probate Judges' Association.

But this morning I don't propose to mention any of those things. They have been fairly well covered in your journals. You have had those contacts during the past six or eight months. I am satisfied in saying that I am glad that we have introduced into the State of Michigan the Filter System, both the medical and the economic. They have achieved wonders in changing, for example, the attitude of the people. It had been considered, and I know because we had hundreds of them in Genesee County, that anyone could come into the Probate Court and get an order for free medical service. I am glad that that has been changed so that people once more can learn and will attempt to stand on their own feet.

But you have problems in connection with the Probate Court; you want to know what the Probate Judges think of you. You want to know what you should do in Probate Court. And if I can in any manner this morning aid you, that is my purpose in being here.

As a general rule, you come into Probate Court for four reasons. The first, to file reports under the Crippled and Afflicted Children's Acts; the second, to file your testimony on mental cases; the third, to give your testimony on contested will or insanity cases; and the fourth, to file your claims for services rendered against deceaseds' estates. I will take them up in that order.

Simplify Your Testimony

There is one complaint which perhaps existed prior to the establishing of the Filter Committees which the Filter Committees have supplanted or done away with, if you wish, and that is this, that in writing your reports you doctors would state, for example, "osteomyelitis." That was all. We probate Judges knew nothing about that, and were it not for the fact that I have been intimately acquainted with physicians and connected with the medical men for a good many years I would not know what it meant, and the Probate Judges know no more what osteomyelitis means than the canary birds know about the ocean. So state the diagnosis in plain English!

You know the slow or doubtful pay patients should be cared for through a partial payment plan, as was suggested by Dr. Perry. We in Genesee County are, I believe, very fortunate, and I believe before long that the partial payment plan is once again coming back into existence, but under an organized fashion. You have always had the partial payment plan and you always will have it, but if you can organize

*This address was presented to the House of Delegates at the 71st Annual meeting of the Michigan State Medical Society, Detroit, September 22, 1936.

it I believe you are going to be better off financially and your patients are going to be better pleased. In my opinion the next session of the Legislature will find a distinction existing between the crippled children and the afflicted children. I believe that you will find the Crippled Children's Commission acting as it did once, purely as a Crippled Children's Commission, and that the afflicted children will be cared for by local agencies out of state funds where that is going to be necessary.

Under the mentally afflicted, you physicians who are called upon to examine a person upon whom or against whom a petition has been filed in Probate Court (the petition alleging that he is insane, feeble-minded or epileptic), are handed a certificate entitled "Mentally Diseased" or "Mentally Afflicted." You don't know what petition has been filed, and it is just as well that you don't, because you will make a more thorough investigation and you won't leave a county in a position that we were in in Genesee County, with a certain woman who was filed upon as being insane. She was in the psychopathic ward at Hurley Hospital and a couple of doctors went up and examined her and reported that she was feeble-minded. Of course the petition for insanity had to be dismissed. A petition was then filed alleging that she was feeble-minded. The doctors went out. One reported "insane" and the other reported "feeble-minded."

We appointed two more doctors, because we wanted to arrive at something that was definite, and these doctors reported, after a very, very thorough investigation, that the woman was epileptic, that they had found a history of epilepsy, certain positive evidences of grand mal, and the result was that we had to dismiss the petition for feeble-mindedness, a petition for epilepsy had to be filed and two more doctors appointed. She is now in Wahjamega, but it cost \$40 in physicians' fees alone before we could get her there.

Mentally Afflicted

I might say that it is part of the legislative program of the Probate Judges' Association for this coming session of the legislature that these cases are going to be filed as mentally afflicted. The doctor will recommend to the Probate Judge that this person be committed to Lapeer, to the insane institutions, or to Wahjamega. The case will be delivered to that institution and if, within ninety days or so, it is found that that patient doesn't belong, we will say, in Ypsilanti, but rather in Wahjamega, the court may, upon certificates from the Superintendent of Ypsilanti, order a transfer to Wahjamega, so that we will no longer have the three separate distinctions of mental cases except as you will find them properly cared for in some institutions, for, after all, they are mentally sick and they need care. The only question involved is, do they need care in a state institution? What institution makes no difference.

The reports that are furnished according to the Supreme Court must set out the facts upon which the physician's report is based, upon which his opinion is based. He can not merely file a report "dementia precox." That is not sufficient evidence so that the court may enter an order of commitment, and if he should he would be liable for damages in the Supreme Court under a writ of mandamus.

I have here two reports which were filed in my court in the last year. I asked my secretary to pull out a couple for me the other day. I could have brought you a hundred which will show the distinctions between a good report and a bad report, but I just had her stick a couple in here. They are her selection, not mine.

The form reads, "I further certify that in my opinion said is an insane person and her condition is such that it requires care and treatment in an institution for the care, custody and treatment of such mentally diseased persons, and that the facts and circumstances upon which such opinion is based are as follows:"

Now the doctor's end of it: "General paresis following syphilitic condition for many years."

Now let me take you to another case. I will omit reading that first part, which is on the printed form, and start in with the doctor's end of it: "A fifty-three year old female appearing well in the usual sense. For the past six or seven years has been talking to herself and becoming untidy, according to her husband. The Black Legion seems to be interwoven with present mental situation; says there are two kinds of money. Black Legion money has a picture of Roosevelt and the green will rub off. States she had received one of these bills in July in a store and handed it right back. Recently found papers in her husband's pocket stating that he must raise \$10 in 1,000 years. Says she is afraid to leave the house because neighbors may ask to have illegitimate relations with her. Stays in the house constantly. Says her husband has relations with several women and has accused him of being too interested in her daughter-in-law. Believes that people often are different from whom they pretend to be. Believes that the Black Legion has had an influence on her washing machine, which she has difficulty with.

"I believe this to be a paranoid condition, probably following menopause."

Now, that, gentlemen, is a report from which the Probate Court may draw several conclusions. The first is that it would do little or no good to commit that person to the State Psychopathic Hospital at Ann Arbor for observation. That is most important to every county, because you know that we pay, as a county, Ann Arbor at the rate of \$3 per day plus, and we pay the first year of care in the state institutions, which at Pontiac is about seventy cents a day, probably a little less than that. It means a big thing to your county, and especially since the 15-mill tax limitation. In Genesee County it is costing us today for our psychopathic ward at Hurley Hospital over \$2,000 a month. I am thankful to say that that is a decrease of 50 per cent over two years ago.

This last report complies with all of the demands made by the Supreme Court upon the physician in reporting mental cases. However, let me make this suggestions: Where a patient which you are examining suggests that her husband is beating her, that he is stepping out nights, it would be well to go into the neighborhood to find out whether that husband and that wife are not having some family difficulties, to find out whether that husband is staying in nights or whether he is keeping such hours that maybe she has some suspicion, and grounds for that suspicion. It would be well to check it with the neighbors.

Now your testimony on the witness stand, which I mentioned as being third in order. Doctors, it doesn't take a psychologist to determine, in the majority of cases, whether you men on the witness stand are biased or not. When you testify so violently in favor of the side that called you, the Court takes everything that you say with a grain of salt, and sometimes with a liberal dose. Just a few weeks ago I was listening to a will contest, and one of our doctors testified, "Anyone who has anemia is insane," and then this statement two or three sentences later: "If that person made that will she is insane."

I immediately found that that will had been validly made, and I could tell from the attitude of the

physician that he was prejudiced against the proponent of the will, and favored the other side. Too often that is true, that the person who is paying you to come into court wants you to testify in his favor and you want to testify in his favor instead of going into the courtroom and telling the court the exact truth as you found it. And the result is that the Court looks at you out of the corner of his mouth and the corner of his eye—and promptly adds a few more grains of salt to the method in which he is taking your testimony.

Filing Carefully Prepared Reports

In return for good reports, in return for fair and honest testimony, what can you expect from the Courts, especially the Probate Courts? Some of you men are not interested in getting additional insanity reports; others of you are. They at least take care of your greens fees. But you would get as a result of filing good and complete reports more of them. You will get special consideration when you walk into the Judge's private office to discuss matters with him, and they are all open so that you can drop in any time and discuss any case you wish. You can expect that your reports and your testimony on the witness stand, if you have always gone into the courtroom fairly and honestly, are going to be more favorably received than those of some other physician who has not done so.

Now that part which should be most important to you physicians, and that is the proposition of filing claims against estates in Probate Court. I am going to give you some sound legal advice here. I want you to consider it as such. Maybe it will make dollars for you, and I hope it does.

The Claim of the Physician in Patient's Last Illness

Now, as Chairman of the Legislative Committee of the Michigan Probate Judges' Association, I have had thrown upon me the duty of recodifying the probate law as affecting estates in the State of Michigan, to have it ready for the next session of the Legislature. And I propose to have as a first-class claim the expenses of the last sickness and death, claims of that class to be heard within thirty days after the appointment of an administrator, and payment to be ordered at once if the estate is in condition so that payment can be made without injury to that estate.

But now comes the legal advice: Only that much of your services which were performed during the last sickness can be considered by any court as a second-class claim. Your ordinary running account is a fourth-class claim. So when you file a claim in Probate Court, itemize that claim, setting out carefully that this portion of it was done as a part of that person's last illness, and which resulted in his death; and the rest of it down here, which was itemized, was part of your current account. Don't merely send a claim on one of your sheets that you send up to anyone of your debtors; don't send it "Balance due, \$265.00." That doesn't tell us anything, and as a result of it you men get gypped and you get gypped royally, and it is through your own carelessness and negligence, or possibly through your lack of understanding about particular phases of the law.

Instruct your secretaries to keep track of what you do and keep it itemized so that you can file in Probate Court an itemized statement. If necessary, file two claims, one asking that it be allowed as a second-class claim, the other one as a fourth-class claim, so that in the event the estate happens to be

insolvent (and once in a while we find insolvent estates as well as we do insolvent physicians and lawyers) you can at least derive, under the present law, a portion of your fee. Have it itemized so that nobody can dispute the services rendered.

Another thing, if you will start to do that you will know what you are doing and when you file that claim and appear in court the Court will know that you know what you are doing, and you are going to get much more favorable consideration in the allowance of your claims and also in the payment of them.

There is one thing that I am going to say in closing. Don't fear to step into any Probate Judge's office and become acquainted with him. He can help you; you can help him. And it is only by mutual understanding of your problems, it is only by discussion, especially in mental cases, with the Probate Judges of that particular case that you are going to help your patient to the utmost. The physicians of Genesee County don't hesitate to call me up over the telephone, drop in and see me, or ask my recommendations on the care of certain mental cases, or crippled children and afflicted children, or anything in that line. They realize that the Probate Judge handles all of them in a busy county, that the medical men have, so that we can help you in solving those cases.

We can do more than that. You men realize that it is true, that between the Medical Society, the individual doctors, the Probate Judges' Association or the individual Probate Judges, that complete understanding leads to friendship, and so, gentlemen, it is with that assurance of a complete understanding that I can bring to you today, to you medical men, from the Michigan Probate Judges' Association, this word: We wish you well, our friends.

Benzedrine Sulfate and Its Value in Spasm of Gastro-intestinal Tract

Abraham Myerson, and Max Ritvo, Boston (*Journal A. M. A.*, July 4, 1936), have found benzedrine sulfate, a sympathicomimetic drug, to be of great value in diminishing or abolishing spasm of the gastro-intestinal tract. This effect is observed when the spasm is due to whatever cause, such as unpleasant emotion, organic disease of the gastro-intestinal tract, and reflex spasm due to disease elsewhere in the body. This effect greatly facilitates the roentgen study of the gastro-intestinal tract, makes differential diagnosis between functional and organic spasm more certain and gives better visualization of organic lesions. The effect is almost immediate and is, on the whole, unattended with any side effects of importance. Clinically, it has been found useful in relaxing spasm, such as is found in spastic colitis and pyloric spasm, and this has been of therapeutic benefit to the patient. The dosage for the average patient is 30 mg. of benzedrine sulfate orally; very stout patients may require 40 mg., while thin and very young individuals are given from 10 to 20 mg. Unpleasant effects may occur in a very small number of cases and consist of chilly sensations, flushing, diarrhea and general malaise. The authors have administered the drug to more than 200 patients and in only one instance was there a severe reaction. There may be sleeplessness or restlessness during the following night if the drug is administered late in the afternoon. The drug causes moderate rise in blood pressure (about 20 to 50 mg. of mercury) and, therefore, it should be used with caution in the presence of severe cardiac disease.



The following is the second of a series of brief articles on the business side of a physician's practice. They offer pithy suggestions and aids to enable the doctor to master, with more ease, a phase of his daily work which is often distasteful but always necessary.

WHEN TO SEND STATEMENTS

ALLISON S. SKAGGS and HENRY C. BLACK

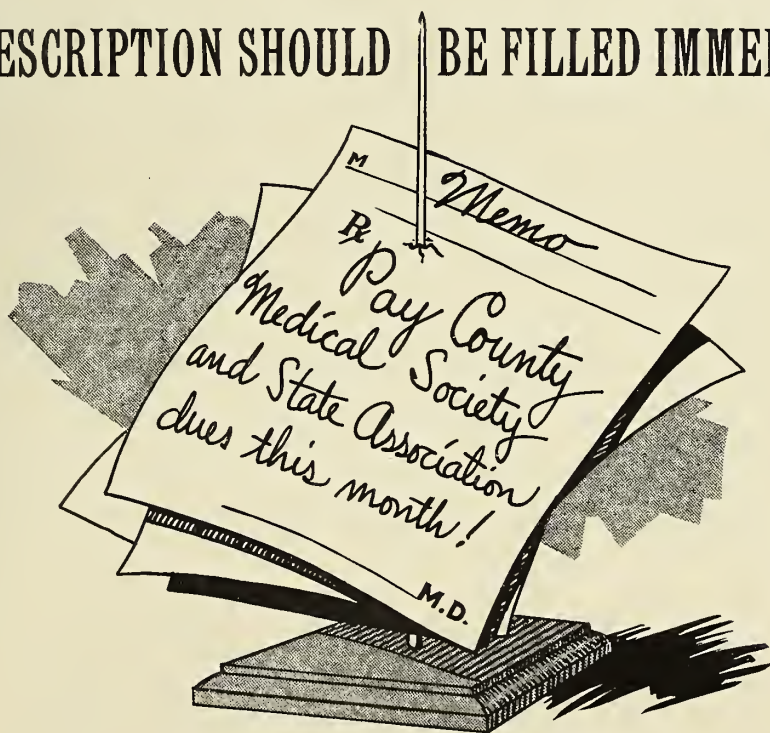
PROMPTNESS in sending out statements is apt to be reflected in the promptness with which patients pay their bills. Too few and, more particularly, too infrequent statements fail to impress upon the patient the importance of paying the account, and very often encourage just as infrequent attention to it.

A careful analysis just made of thousands of patients' accounts shows that the majority of payments brought in just from statements come in the first sixty to ninety days, and very few payments are made without

other collection effort after that time. Further effort to collect the account should commence immediately after this ninety-day period, at which time statements should be discontinued until payments are resumed.

The doctor's relationship to his patient is a personal one. A statement is a dignified, yet personal medium of telling the patient how much he owes; a statement with a notation such as "Please," "Please Remit," "Past Due," et cetera, is an undignified and careless approach to the collection problem, which immediately breaks down that personal relationship between the doctor and his patient so important from a goodwill standpoint.

THIS PRESCRIPTION SHOULD BE FILLED IMMEDIATELY



President's Page

COMING LEGISLATION

JANUARY 6, 1937, marks a momentous day in the lives of every one of the 5,474 Doctors of Medicine of this State. The Michigan Legislature convenes that day in Lansing. Many of the proposals which will be considered by the thirty-two State Senators and one hundred Representatives will be of interest to physicians; a number of other matters will be of great concern to them and to their patients. The very problems of the doctor and his county medical society which have been the subjects of study for the past five or six years will be on the calendar of the Legislature. For example, we shall hear much of welfare and relief, including recommendations for change in the laws affecting the crippled and afflicted child: and my question to you is, has the welfare set-up to date satisfied you in its medical care phases, and has adequate medical care been accorded those patients of yours who are so unfortunate as to be recipients of the bounty of others? If your answer is "no," it is up to you, Doctor, to outline how adequate medical care should be administered under the new welfare laws, since it will be *you* who must carry out the legal provisions and supply the necessary commodity!

The social security law has important implications for the physician who must be interested in the immediate and eventual results. For instance, will Old Age Benefits and Unemployment Insurance supply sufficient money to permit the recipient to obtain the major necessities of food, clothing, shelter, and medical care? Another matter of importance is the proposed occupational disease bill (Question: Is complete coverage the same as socialized medicine?); then let us consider seriously the proposed group hospitalization bill, to be sponsored by the Michigan Hospital Association.

In the particular realm of Medicine, the Legislature will be asked to consider raising the educational standards of those who in future aspire to treat the sick. Such a proposal would not affect those now in practice, but would insist that future healers know about the human body and about the basic sciences before they are permitted to practice on the people of a community. This will not be a doctors' bill but a public health measure.

From the above brief outline, which does not include all the legislation in which we physicians have an interest and a concern, you can appreciate just why January 6 is a big day for the medical profession and the individual practitioners of Michigan as well as for the people! My sincere request of you is to *know* what is going on in the Capitol during the session of the Legislature, and to *act* when called upon by the officers of your medical society, in the interest of your patients and the public health you swore to protect when you chanted the Hippocratic Oath.



President of the Michigan
State Medical Society

Proposed Basic Science Bill, Michigan

A BILL

To regulate the practice of healing in the state of Michigan; to provide for examinations in basic sciences as a prerequisite to eligibility to practice the art of healing in this state; to provide for the appointment of a board of examiners in the basic sciences, and to prescribe its powers and duties; to provide for the punishment of offenders against this act; and to repeal all acts and parts of acts inconsistent with the provisions of this act.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

Section 1. It is the intent and purpose of this act to protect the welfare and health of the people of this state, and to this end to require the passage of uniform examinations in the basic sciences, as herein defined, as a condition of eligibility to practice the art of healing in this state.

Sec. 2. The governor shall appoint a board of examiners in the basic sciences, by and with the advice and consent of the senate, to consist of six members. The first appointments shall be made within sixty days after this act shall take effect, two members to be appointed for terms of two years each, two members for terms of four years each, and two members for terms of six years each, and until the appointment and qualification of their successors. Upon the expiration of such terms, successors shall be appointed for terms of six years each, and until the appointment and qualification of their successors. Vacancies shall be filled in the same manner as original appointment, for the unexpired term. Each member shall qualify by taking and filing with the secretary of state the constitutional oath of office. Members of the board shall be full time professors, or associate or assistant professors, who are teaching the subjects of the basic sciences in any university or college in this state accredited by the North Central Association of Secondary Schools and Colleges. One member shall be appointed for his fitness to examine in each of the six following subjects: anatomy, physiology, bacteriology, pathology, hygiene and public health, and chemistry. No member of the board shall be actively engaged in the practice of healing.

Sec. 3. The members of said board shall within thirty days after their appointment meet and elect a president and a vice-president from their own number, and elect or appoint a secretary-treasurer who need not be one of their number, but each of whom shall hold their respective offices for two years and until their successors are elected and qualified. Any member of the board and the secretary-treasurer shall have power to administer oaths. The

secretary-treasurer shall give to the treasurer of the state of Michigan a bond in the penal sum of five thousand dollars, with sufficient sureties to be approved by the state treasurer, for the faithful discharge of his duties. A majority of the board shall constitute a quorum for the transaction of business. The board shall keep a record of its proceedings and register of all applicants for license which register shall show whether the applicant was rejected or a certificate granted. The books and register of the board shall be prima facie evidence of all matters recorded therein. The board shall have a common seal and shall formulate rules and regulations to carry out the provisions of this act. The board shall meet at such times and places as shall be designated by the board, and shall conduct at least two examinations in the basic sciences each year. The board shall conduct examinations at such times and places as it deems best, having due regard to the times and places of the examinations held by the several examining boards authorized to issue licenses to practice any of the branches of the healing art.

Sec. 4. The board may determine the compensation of the secretary-treasurer and of such other assistants as may be necessary to carry out the provisions of this act. The members of the board shall serve without compensation, but shall be entitled to receive actual and necessary traveling and other expenses incurred in the discharge of their duties. The board is authorized to incur such expenses as may be necessary to carry out the provisions of this act. The secretary-treasurer and other assistants shall receive actual and necessary traveling and other expenses incurred in the discharge of their duties. The expenditures of the board shall not exceed the estimated revenue to be derived from the fees prescribed by this act.

Sec. 5. Any person desiring to practice healing in this state shall make application to the board of examiners in the basic sciences for a certificate of eligibility to take the examinations therein, such application to be accompanied by a fee of fifteen dollars, and the said board shall issue such certificate upon the following conditions, viz.:

Each applicant shall show to the satisfaction of the board that he is of good moral character, and possesses a high school education, or its equivalent; and shall present satisfactory evidence to the board of having completed two years of work leading to a degree in the sciences and arts in a college approved by the North Central Association of Secondary Schools and Colleges, or the equivalent thereof; and in addition, pass an examination before the board and to its satisfaction in the following subjects: anatomy, physiology, pathology, bacteriology, hygiene and public health, and chemistry, with a grade of not less than 75 per cent in each subject: Provided, That the board may, in its discretion, waive the examination herein required when proof satisfactory to the board is submitted, showing (1) that the applicant has passed in another state of the United States an examination in the basic sciences, (2) that the requirements of that state at the time of such examination are not less than those required by this act for the issuance of a certificate,

(3) that like exemption from examination in the basic sciences is granted by such state to holders of certificates of eligibility issued under the provisions of this act, and (4) the application for such certificate is accompanied by a fee of twenty-five dollars. The fee for endorsement of a certificate issued under this act to another state shall be five dollars.

A certificate of eligibility issued under this act shall be signed by the president and secretary-treasurer of the board, and shall be sealed with the seal of the board.

If the applicant shall fail in one subject only, he may be examined in such subject at the next ensuing examination without payment of an additional fee: Provided, That he shall file an application with the board in accordance with the rules of the board. If the applicant shall fail in two or more subjects, he shall file an application for examination in all subjects and shall show proof satisfactory to the board of additional study in the basic sciences; and such application shall be accompanied by a fee of fifteen dollars. No person shall be eligible to more than three examinations within a period of three years.

Sec. 6. No examining board for any branch or system of healing shall admit to its examinations, or license, or register, any applicant to such board, unless such applicant shall first present to said board a certificate of eligibility in the basic sciences issued under the provisions of this act.

Sec. 7. Any member of the board may issue a subpoena requiring any person to appear before the board and be examined with reference to any matter within the scope of the inquiry or investigation being conducted by the board and to produce any books, records or papers. Any member of the board may administer an oath to a witness in any matter before the board. In case of disobedience of a subpoena, the board may invoke the aid of any circuit court of the state of Michigan in requiring the attendance and testimony of witnesses and the production of books, papers and documents. And any of the circuit courts of the state within the jurisdiction of which such inquiry is carried on may, in case of contumacy or refusal to obey a subpoena, issue an order requiring such person to appear before said board and to produce books and papers if so ordered and give evidence touching the matter in question; and any failure to obey such order of the court may be punished by such court as a contempt thereof.

Sec. 8. The board may revoke any certificate of eligibility granted upon mistake of material fact or by reason of fraudulent misrepresentation of fact by any applicant, or when the holder shall be convicted under Section 9 of this Act.

Sec. 9. If any person shall unlawfully obtain or procure a certificate of eligibility under the provisions of this act, whether by false and untrue statements contained in his application to the board, or other fraud or misrepresentation, or if any person shall forge, counterfeit or alter any certificate of eligibility issued under the provisions of this act, or if any person shall practice healing

without securing the certificate required under this act, he shall be guilty of a felony, and shall be subject to the penalties prescribed therefor by law.

Sec. 10. The terms "practice of healing," "art of healing," "healing art," "healing" as used in this act shall be construed to mean and include any system, treatment, operation, diagnosis, prescription, or practice for the ascertainment, cure, relief, palliation, adjustment, or correction of any human disease, ailment, deformity, injury, or unhealthy or abnormal physical or mental condition: Provided, That this act shall not be construed as applying to dentists, pharmacists, nurses, optometrists, and chiropodists, practicing within the limits of their respective callings; nor to persons specifically permitted by law to practice without licenses, who practice each within the limits of the privilege thus granted to them.

The term "basic sciences" as used in this act shall be construed to mean and include anatomy, physiology, bacteriology, pathology, hygiene and public health, and chemistry.

Sec. 11. All moneys received by the board of examiners in the basic sciences shall be paid promptly into the state treasury and shall be credited to the general fund of the state to be disbursed as appropriated by the legislature, and a receipt for the same shall be filed by the secretary-treasurer of the said board in the office of the auditor general. The expenses of the board shall be met from the appropriation made therefor by the legislature.

Sec. 12. This act shall not apply to any legally registered and licensed person engaged in the practice of healing on the effective date of this act.

Sec. 13. The certificate of eligibility required under the provisions of this act shall be construed as an additional qualification of applicants for examination, or license, or registration, in any of the branches of the healing art, and as a condition precedent thereto. It shall not be construed to in any way be a substitute for or in lieu of any of the requirements prescribed by law or by any examining board in any of the branches of the healing art.

Sec. 14. The board of examiners in the basic sciences shall in no manner discriminate against any system or branch of healing. No applicant shall be required to disclose the professional school he may have attended or what system of the healing art he intends to pursue. The examination papers shall not disclose the name of any applicant, but shall be identified by numbers to be assigned by the secretary-treasurer of the board.

Sec. 15. Should any provision or section of this act be held to be invalid for any reason, such holding shall not be construed as affecting the validity of any remaining portion of such section or of this act, it being the legislative intent that this act shall stand, notwithstanding the invalidity of any such provision or section.

Sec. 16. All acts and parts of acts only insofar as inconsistent with the provisions of this act are hereby repealed.

DEPARTMENT OF SOCIETY ACTIVITY

L. FERNALD FOSTER, M.D., Secretary

Council Chairman's

- - - Communication

MINUTE MEN OF MEDICINE

MINUTE men in each County Medical Society are needed now!

In Revolutionary days, minute men were called upon to defend their country. They left their plow and rake and rushed to the protection of the State.

Today we find the need of such men to defend Medicine.

Many emergencies arise that require immediate action. We must have available members of county societies who will act when called upon, in the interests of public health.

The officers of the Michigan State Medical Society are doing all in their power for Medicine, but they are only human and cannot perform two and three jobs at the same time.

Meetings of lay groups discussing problems of social security, relief and welfare, legislation, social aspects of sickness, etc., all of which have medical implications, must be attended by representatives of the state and county medical societies, to protect medical practice. If they are not covered, action inimical to you and your patients may result.

Such an emergency arose a few days ago. You were represented at this important meeting only through the personal sacrifice of a leader in medicine—a man who has your interests and the good of his profession at heart.

Keep abreast of the times for we shall call upon you. We expect you to respond—as a minute man—rushing to the defense of that which is right and good.

P. R. URMSTON, M.D.
Chairman of the Council

SOCIAL SECURITY, AND PHYSICIANS

VARIOUS Social Security Act forms are being distributed at this time to millions of employees and employers.

What is the status of physicians?

1. *Old Age Benefits:* A physician who employs one or more persons in his office is an employer as defined by the Social Security Act. He, as well as his employee or employees, is subject to the taxing provisions of Title No. 8 of the Act which deals with *old age benefits*.

(a) A physician in the classification of "employer" should fill out the Social Security forms. So should his employee or employees. Forms should be filed with the local postal authorities or the district Internal Revenue Office.

(b) A physician in the classification of "employee" is considered an independent contractor, and thus is not subject to the taxes imposed on an employee, except where the physician is regularly employed on a full or part-time basis and is receiving a salary.

The old-age benefit taxes imposed on employers and employees apply to wages paid on or after January 1, 1937. Tax returns must be filed and the tax paid monthly. Information returns must be made quarterly. The present tax is 1 per cent and is imposed on the first \$3,000 of wages paid to any employee during the calendar year.

2. *Federal Unemployment Compensation:* Unless a physician has eight or more employees, he is exempt from Title No. 9 of the Act relating to unemployment compensation and is not subject to the payroll tax imposed by that part of the Act. He is, however, subject to the new Michigan Unemployment Insurance Act, placed on the Statute books December

23, 1936 (to be digested in the February issue of *THE JOURNAL*).

Detailed information on forms, taxes and procedure will be found in Regulations 91 relating to employes' and employers' taxes under Title No. 8 of the Social Security Act. If a copy of Regulations 91 cannot be obtained from local postmasters, one may be obtained from the Collectors of Internal Revenue of the respective Michigan districts.

CONTRACT PRACTICES

MUCH discussion has developed lately in the several county medical societies relative to various forms of contract or agreement practices, particularly those involving municipalities, insurance companies, lodges and fraternal orders.

With large rural and urban districts in Michigan, the interpretation of such practices is obviously varied in the widely different communities.

Many county societies are referring all practices, not on a strictly office and visit fee basis, to a committee for review and subsequent approval or disapproval by the county medical society. By this procedure no physician accepts any form of practice which is not approved by his county medical society.

Fee schedules for any such form of practice should be set by a unit of organized medicine so that no unfair competitive measures could be adopted by individuals.

This subject should be considered by every county medical society and solved on the basis of fees and conditions existing in the respective locality.

INTEREST IN MEDICAL ACTIVITIES—A SACRIFICE

WE frequently wonder whether the practitioners of medicine are alert to the importance of organized medicine and its activities. At times we become concerned over the apparent lethargy of some physicians and their seeming lack of interest in the many vital problems facing the profession as a result of the changes in our social order. However, to compensate for this occasional concern, we are heartened by

a growing interest in scientific medicine and its economic phases.

At the conference held recently in the Upper Peninsula, a call was issued for the gathering of representatives from the counties of that area. Thirty-one physicians answered the call from nine of the ten component county medical societies, representing all but one of the fifteen counties embraced in their jurisdiction. The significance of this attendance can be appreciated only when one realizes that some of these men drove over 400 miles, and many over 200 miles, for the meeting. These were not ordinary miles, they were miles over icy roads, piled several feet high with snowdrifts. Isn't this a sacrifice for organized medicine?

It is expressions of such interest that hearten your State officers and committeemen. It is these sacrifices of time and effort and the physical risks incurred by our colleagues that should inspire every doctor of medicine to participate in the activities of organized medicine in an effort to maintain its traditions and solve its own problems.

COUNTY SECRETARIES' CONFERENCE

SUNDAY, February 7, 1937, has been set for the Secretaries' Conference of County Secretaries of the Michigan State Medical Society. There will be a snappy, concise program and luncheon with hours from 11:00 A. M. to 3:00 P. M.

The program is so designed as to bring to the Secretaries, in an interesting way, much information regarding Scientific Medicine and its economic phases.

Attendance at the Conference is an obligation devolving upon each and every County Secretary. He is key man in the County Society and through him must go much important information to the individual practitioner.

We are planning on 100 per cent attendance of the Secretaries and hope that other officers and key men of each society will attend. Expenses on a mileage basis will be paid by the Michigan State Medical Society for County Secretaries.

**REMEMBER—SUNDAY—FEBRUARY
7, 1937, AT LANSING**

IMPORTANT DECISIONS BY EXECUTIVE COMMITTEE OF THE COUNCIL

THE December meeting of The Executive Committee of The Council was held in Detroit on December 9, 1936. Much business was transacted and several decisions of considerable moment to practitioners of medicine were made.

A request was made to the State Department of Health to inaugurate a Tuberculosis Control Service with an annual budget of \$125,000; also, the appointment of a Director of Medical Relations to act as coördinator of preventive medicine procedures was urged on the State Health Department. The final draft of the proposed basic science bill was approved. The Journal of the Michigan State Medical Society was ordered copyrighted. Action was taken to insure payment to physicians for medical and surgical care of afflicted and crippled children, as per the two state laws. State Society dues for 1937 were continued at \$10. The Committee on Scientific Work for the Annual Meeting of 1937 was appointed. Tightening up of rules governing the medical defense fund was ordered.

The minutes of the December meeting of the Executive Committee of The Council follow:

1. *Roll Call.*—The meeting was called to order in the WCMS Building at 3:15 p. m., by Dr. P. R. Urmston, Chairman. Those present were: Drs. Urmston, Bay City; Henry R. Carstens, Detroit; A. S. Brunk, Detroit; I. W. Greene, Owosso; F. E. Reeder, Flint; President H. E. Perry, Newberry; President-Elect Henry Cook, Flint; Secretary L. Fernald Foster, Bay City; Editor James H. Dempster, Detroit; Councilor H. H. Cummings, Ann Arbor; also Dr. L. O. Geib, Detroit; Dr. Grover C. Penberthy, Detroit; Dr. R. R. Smith, Grand Rapids; Dr. O. A. Brines, Detroit; and Dr. M. H. Hoffmann, Detroit. Absent: Dr. T. F. Heavenrich, Port Huron.

2. *Minutes.*—The minutes of the meeting of November 11, 1936, were approved as printed, and distributed to the members.

3. *Gavel.*—President Perry presented a gavel to the Chair, the gift of Dr. Grover C. Dillman, President of the Michigan College of Mining. Motion of Drs. Reeder-Carstens that the Executive Committee of The Council send resolutions to Dr. Dillman, signed by Chairman Urmston, thanking him for this gift to the Michigan State Medical Society. Carried unanimously.

4. *Monthly Financial Report.*—The financial report for the month of November was presented. Dr. Carstens, Chairman of the Finance Committee, spoke of the budgets which each committee has been requested to submit to the Finance Committee for the 1937 budget of the MSMS. The membership report, the JOURNAL report and bills payable were presented. Motion of Drs. Carstens-Greene that the reports be approved and the bills for the month be paid. Carried unanimously.

	1936	1935
Paid Membership:		
From January 1 to Nov. 30, inc.....	3,699	3,590
(This includes Wayne County) ...	1,446	1,390
From November 1 to Nov. 30, inc...	48	22
(This includes Wayne County) ...	33	None
Advertising Sales:		
Sales for November, 1936.....	\$768.42	
Cost of printing JOURNAL for Nov., 1936	748.40	

The Executive Committee, on motion of Drs. Brunk-Greene, instructed that a stenotype reporter be obtained to take notes on the Panel Discussion of December 9, 1936. Carried unanimously.

From Finance Committee—Dr. O. A. Brines, Chairman of the Cancer Committee, presented his proposed budget for 1937, and gave a résumé of the expense of his committee for 1936, which amounted to \$769, of which the Joint Committee on Public

Health Education assumed \$500. Motion of Drs. Greene-Brunk that the sum of \$269 be paid by the Michigan State Medical Society to the Joint Committee on Public Health Education, said amount to include the bill of \$201.60 due C. R. Burd for lantern slides, and the total to be charged to the Cancer Committee for 1936 expense. Carried unanimously. Dr. Norman F. Miller's expenses of \$10 for giving a lecture to the Upper Peninsula Medical Society in August, 1936, were approved on motion of Drs. Carstens-Greene and ordered paid. Carried unanimously.

Motion of Drs. Carstens-Brunk that the approved vouchers for the Hobby Exhibit, arranged by the Woman's Auxiliary at the Annual Meeting of 1936, amounting to \$71.96, be approved and paid. Carried unanimously.

The matter of printing vouchers to be given to committee members to indicate their mileage, same to be returned to the Executive Office for payment within 10 days of the date of the meeting, was approved on motion of Drs. Carstens-Brunk. Carried unanimously.

Dues for 1937. Motion of Drs. Reeder-Brunk that the 1937 dues remain at \$10 as set by the House of Delegates. Carried unanimously.

5. *Schedules A, B, C, & D.*—Dr. T. K. Gruber, Chairman of the Liaison Committee with the Michigan Hospital Association, gave a report of the meeting with the MHA representatives on December 4, 1936, at Harper Hospital. After full discussion, motion of Drs. Greene-Brunk that the Special Committee on Fee Schedules A, B, C, D be continued and that it make arrangements to meet with representatives of the Michigan Hospital Association and the Michigan Roentgenological Society at once, and to report its findings to the Executive Committee at its next meeting. Carried unanimously.

The problem of payment to physicians for care of crippled and afflicted children for work done in July, August and September, was referred to the Contact Committee to Governmental Agencies to take up with the proper officials in Lansing.

6. *Representation on Social Security Study Commission.* The matter of requesting Governor-Elect Murphy for medical representation on his Social Security Study Commission was discussed. Motion of Drs. Carstens-Greene that the Governor-Elect be memorialized through proper channels with a request that the medical profession be represented thereon. Carried unanimously.

Dr. J. M. Robb and Dr. S. W. Insley were appointed to represent the Michigan State Medical Society at a meeting of this Study Commission to be held at the Statler Hotel, December 10, 1936, at

10:00 a. m. on motion of Drs. Brunk-Greene and carried unanimously.

7. *Admission Policy at U. of M. Hospital.*—Dr. Penberthy reported that his committee was working on this problem and the Executive Committee requested a progress report at the January meeting.

8. *Medical Defense Fund.*—The importance of tightening the rules and regulations governing the Medical Defense Fund was discussed. Dr. Greene stated that the Constitution and By-laws specifically states that a person *in arrears* is not protected by the fund against malpractice suits. Motion of Drs. Greene-Reeder that a notation be placed on the back of the certificate sent to all members outlining the regulations concerning dues in arrears and medical-legal defense. Carried unanimously.

9. *1937 Annual Meeting.*—Dr. Foster gave report on plans for the meeting. At least seventeen speakers will be needed for the General Sessions. Motion of Drs. Greene-Brunk that the Committee on Scientific Work for the 1937 Annual Meeting be composed of Secretary Foster as Chairman, assisted by the Chairmen of the Seven Sections. Carried unanimously. Motion of Drs. Reeder-Brunk that the contract with the Grand Rapids Civic Auditorium be signed. Carried unanimously.

10. *Public Relations Committee Report.*—(a) The budget for a T. B. Control Service in the State Department of Health, at \$125,000 per year, was discussed, and approved, on motion of Drs. Brunk-Reeder, and carried. This will be submitted to Health Commissioner Slemmons, as per his recent request. (b) A Syphilis Control Committee, as recommended by Surgeon General Parran and approved by Dr. Slemmons, was authorized by the Executive Committee, same to be appointed by the President with the advice of the Preventive Medicine Committee. (c) The need for a medical coördinator to teach preventive medicine procedures to practitioners was discussed. Motion of Drs. Brunk-Greene that a request be made for a medical coördinator who is to be under the jurisdiction of the Michigan State Medical Society but assigned to the Michigan State Department of Health was carried unanimously. Motion of Drs. Greene-Brunk that this matter be discussed with Governor-Elect Murphy by the Contact Committee with Governmental Agencies. Carried unanimously. (d) It was recommended that in future the various committees of cardiology, syphilology, etc., should be made subcommittees of the Preventive Medicine Committee.

11. *Mental Hygiene Committee.*—(a) The recommendation that more time be allotted to Mental Hygiene in Postgraduate programs of the MSMS and the U of M was referred to Dr. H. H. Cummings. (b) The request of the Mental Hygiene Committee to send a letter to county medical societies re speakers on this subject was approved on motion of Drs. Brunk-Greene and carried unanimously. The subjects to be discussed before the medical profession at these programs were presented by Dr. H. A. Luce, Chairman, and also approved by the Executive Committee.

12. *From Legislative Committee.*—The Basic Science Bill, as adopted by the Legislative Committee today, was approved by the Executive Committee of the Council on motion of Drs. Brunk-Reeder. Carried unanimously.

13. *The Journal.*—The necessity for copyrighting THE JOURNAL was expressed by Editor Dempster; this action was approved by the Executive Committee on motion of Drs. Brunk-Greene. Carried unanimously.

14. *Date of Midwinter Meeting of The Council.*—Wednesday and Thursday, January 20 and 21, 1937, were selected as the dates for the Midwinter Meet-

ing of The Council, on motion of Drs. Brunk-Greene. Carried unanimously. The meeting will be held at the Statler Hotel, Detroit.

15. *Radio Talks.*—The five radio talks as presented by the Radio Committee and the Public Relations Committee, were approved on motion of Drs. Brunk-Reeder. Carried unanimously.

16. *Emergency Bulletin.*—Secretary Foster spoke about the necessity for emergency bulletins being issued at certain periods by one or two of the more important committees of the Michigan State Medical Society. Motion of Drs. Greene-Reeder that, in case of emergency, any committee may send out bulletins at the discretion of the Chairman of The Council and the Secretary. Carried unanimously.

17. *Medical History of Michigan.*—Some 310 copies of the Medical History of Michigan are still on hand in the office of the Bruce Publishing Company in St. Paul. The Executive Committee authorized that same be publicized and be sold at a price to be decided upon by the Secretary and the Executive Secretary.

18. *Adjournment.*—The meeting was adjourned at 6:20 p. m. The Chair thanked the Wayne County Medical Society for its hospitality and the members for their attendance and helpful advice.

COUNCIL AND COMMITTEE MEETINGS

1. **December 4, 1936.**—Liaison Committee of Michigan State Medical Society with Michigan Hospital Association—Harper Hospital, Detroit, 12:30 p. m.
2. **December 6, 1936.**—Legislative Committee—Hotel Olds, Lansing—3:30 p. m.
3. **December 9, 1936.**—Legislative Committee—WCMS Bldg., Detroit—2:00 p. m.
4. **December 9, 1936.**—Executive Committee of The Council, WCMS Bldg., Detroit—3:00 p. m.
5. **December 9, 1936.**—Economics Committee—WCMS Bldg., Detroit—1:00 p. m.
6. **December 12, 1936.**—Cancer Committee—University Hospital, Ann Arbor—4:00 p. m.
7. **December 20, 1936.**—Maternal Health Committee—Hotel Olds, Lansing—10:00 a. m.
8. **December 20, 1936.**—Advisory Committee on the Syphilis Control Program—University Hospital, Ann Arbor—2:30 p. m.
9. **January 20-21, 1937.**—The Council of the Michigan State Medical Society, Hotel Statler, Detroit.

MINUTES OF MEETINGS OF MENTAL HYGIENE COMMITTEE

October 22, 1936

The Mental Hygiene Committee of the Michigan State Medical Society met October 22, 1936, at Eloise Hospital, Eloise, Michigan.

Those present were Drs. Hoffman, Raphael and Luce. Absent, Drs. Inch and Campbell. Guest present, Mr. George M. Read.

Plans for the year's activities were formulated and it was decided to release all material for radio talks and addresses through the Joint Committee on Public Health Education after having been approved by the Mental Hygiene Committee of the Michigan State Medical Society. Radio talk dates are November 19, December 17, 1936, and January 14, 1937.

H. A. LUCE, M.D.
Chairman.

JOUR. M.S.M.S.

November 13, 1936

The Mental Hygiene Committee held its second regular meeting of the year, November 13, 1936, at Eloise. All of the members of the Committee were in attendance.

The following matters were considered:

1. The general procedure required of all committees of the State Medical Society relative to suggestions and procedures recommended by such individual committees was thoroughly explained and discussed.

2. The desirability of integration of the activities of this committee with similar committees of other state groups, as social workers and teachers, was discussed and approved.

3. The preparation of the next state-wide radio program to be broadcast in December was taken up in detail. This broadcast is to deal with the present status of psychiatric and mental hygiene activities and efforts in Michigan. Material for this presentation is to be assembled by specially selected representatives for the various aspects involved, as state hospitals, delinquency, educational and community clinical services.

4. Further consideration was given the preparation of a list of speakers for broadcast and for various professional and lay groups. Preparation of script for such use was also discussed and the desirability of the release of same, through proper channels, to suitable groups throughout the state.

5. The advisability of considering indications for statutory additions and changes was taken up. This aspect was felt to be a very important one and was referred to Dr. Inch, of the Committee, for further examination and suggestions.

6. It was voted to recommend to The Council of the Michigan State Medical Society that it approve the recommendation of the Mental Hygiene Committee that more time be allotted to mental hygiene problems by the Postgraduate Program Committee.

It is suggested, further, that such subjects as the following be included: the neurosis, the psychoneuroses, maladjustment problems, types of patients who should be institutionalized, care of paroled patients, education of families in care of their mentally ill members, etc.

7. It was decided to hold the next regular meeting of the Committee in December, the exact date and place to be announced later.

T. RAPHAEL, M.D.,
Acting Secretary.

MINUTES OF MEETING OF LEGISLATIVE COMMITTEE

November 10, 1936

1. *Roll Call.*—The meeting of the Legislative Committee was called to order by Dr. L. G. Christian, Chairman, in Parlor B of the Hotel Olds, Lansing, November 10, 1936, at 4:30 p. m. Those present were Drs. Christian of Lansing; F. B. Burke, Detroit; Henry Cook, Flint; Philip A. Riley, Jackson; P. R. Urmston, Bay City; and J. B. Bradley, Eaton Rapids. Also present were Drs. Henry E. Perry, President, Newberry; F. E. Reeder, Speaker of the House, Flint; L. Fernald Foster, Secretary, Bay City; F. T. Andrews, Councilor, Kalamazoo; I. W. Greene, Councilor, Owosso; John H. J. Upham, President-Elect of the American Medical Association, Columbus, O.; H. A. Miller, Lansing; and Executive Secretary Wm. J. Burns.

2. *Minutes.*—The minutes of the meeting of September 9, 1936, were read and approved.

3. *Basic Science Bill.*—The Chair read recommendations from the minutes of the Executive Committee meeting of October 7, 1936, relative to minor changes in the phraseology of the proposed basic science bill.

At this point the Chair introduced Dr. John H. J. Upham of Columbus, Ohio, President-Elect of the American Medical Association, who spoke briefly on his experience with legislation in Ohio.

The Chair thanked Dr. Upham for bringing to this committee much valuable advice, gained from his experiences.

With changes as recommended, the proposed Basic Science Bill was approved by the Legislative Committee and referred to the Executive Committee of The Council.

4. *Chairman's Statement.*—Dr. Christian read a prepared statement concerning the problems confronting the medical profession in the 1937 Legislature. He suggested that the Executive Committee of The Council and the President should meet with Governor Murphy re the new relief commission of which Dr. Wm. Haber is Chairman, so that the medical viewpoint in this important matter is given. The necessity for good Public Health Committees in the House and Senate was stressed by Dr. Christian.

5. *Proposed Legislative Bulletin No. 4* was read to the Committee, corrected, approved, and ordered disseminated.

6. *Request for Copy of Basic Science Bill.*—A letter from the Michigan Osteopathic Association of Physicians and Surgeons, written by Sherwood J. Nye, 706 Peoples State Bank Building, Pontiac, Michigan (Secretary), asking for a copy of the proposed Basic Science Bill, was read. The Committee instructed that a copy of the tentative Bill as now drafted be sent to the Association, and that Osteopath Nye be telephoned and asked for his suggestions and corrections.

7. *Adjournment.*—The meeting was adjourned at 6:25 p. m.

MINUTES OF MEETING OF PREVENTIVE MEDICINE COMMITTEE

November 29, 1936

1. *Roll Call.*—Meeting was called to order by Dr. L. O. Geib, Chairman, in Grayling, Michigan, at the residence of Dr. Claude R. Keyport, Sunday at 3:30 p. m. Those present were Dr. Geib, Detroit; Dr. J. J. O'Meara, Jackson; Drs. G. C. Stucky, Lansing; Council Chairman P. R. Urmston, Bay City; Secretary L. Fernald Foster, Bay City; Dr. C. R. Keyport and Dr. C. G. Clippert of Grayling; Henry F. Vaughn, Detroit, Commissioner of Health, and Executive Secretary Wm. J. Burns. Absent: Dr. J. D. Brook, Grandville; Dr. G. M. Byington, Detroit; Dr. A. L. Callery, Pt. Huron; Dr. R. B. Harkness, Hastings; Dr. R. M. McKean, Detroit; Dr. R. L. Wade, Coldwater.

2. *Minutes.*—The minutes of the meetings of June 10 and of September 23 were read and approved.

3. *Report of the Reference Committee* on the Annual Report of the Preventive Medicine Committee for 1936 and the action of the House of Delegates was read from the proceedings of the House. The Committee felt that each county medical society should be notified that plans for Red Cross First-Aid Stations in the county should be placed before the advisory committee of the county medical society before their establishment, as this is a medical project.

4. *Director of Medical Relations.*—Dr. Vaughn explained the T. B. Program, as developed in De-

troit. Discussion brought out the necessity for a "Director of Medical Relations" connected with the Michigan Health Department, financed by Social Security funds, and/or foundations interested in preventive medicine. This committee recommended that the Michigan State Medical Society express its confidence in all phases of preventive medicine work—all phases, however, should emanate from the private practitioner in his own office, insofar as possible. Motion of Drs. O'Meara-Stucky that the Preventive Medicine Committee respectfully call to the attention of the Executive Committee of The Council its reiteration of the necessity for the early appointment of a Director of Medical Relations (a medical coördinator of preventive medicine and allied activities) as expressed and approved by the House of Delegates at its meetings of 1934 and 1935. Motion carried unanimously.

5. *Tuberculosis Control Service.*—Reprints of the series on Tuberculosis in the Detroit News can be obtained in any amounts, according to Dr. Vaughn, with the compliments of Mr. Scripps. It was felt that the membership should be circularized, and several thousand copies in addition should be on hand, for distribution to the public—at least 7,000 copies.

The suggestion of State Health Commissioner Slemons that a tentative budget for a Tuberculosis Control Service in the State Department of Health (which may possibly be organized) should be recommended by this Committee, was discussed. Dr. Vaughn stated that some \$150,000 and \$200,000 extra would be asked annually for tuberculosis work for the next five years in Detroit.

The following tentative budget was recommended to the State Department of Health, as requested, on motion of Drs. Stucky-O'Meara, and carried unanimously:

Tuberculosis Testing.....	\$ 40,000
X-Ray Examinations.....	40,000
Medical Attendance.....	10,000
Health Education.....	10,000
Additional Personnel.....	20,000
Statistical Service.....	5,000

\$125,000 per year

The work of the T. B. Control Service will be aided by the Advisory Committee of the Michigan State Medical Society.

6. *Public Health Costs.*—The Committee discussed the total allotment of funds for local health activities in the various counties, and respectfully requested the State Health Commissioner to give the MSMS the total allotment and also the source of funds, from the Federal Government (Social Security funds), from the State of Michigan, from the County, and from the City, where a city exists.

7. *Venereal Disease Program.*—This was discussed by the Preventive Medicine Committee, and a motion was made by Drs. O'Meara-Stucky that the matter be referred to the Executive Committee of The Council, with the recommendation that a State Society committee on the study of Syphilis control be appointed, as per the suggestion of Surgeon-General Parran. Carried unanimously. The Preventive Medicine Committee recommended that this new committee, when appointed, be made a Subcommittee of the Preventive Medicine Committee, in order to aid committee organization of the State Society.

8. *"Your Doctor and You,"* from Wichita, Kansas, a leaflet, was read, and it was suggested that the Secretary send same out with his Secretary's Letter to the entire membership.

9. *Preventive Medicine Cards from Milwaukee* were presented. It was recommended that two or

three could be sent with the Secretary's Letter to the entire membership, and that others could be inserted in THE JOURNAL in such a way as to be clipped by the individual member (with the approval of the Milwaukee County Medical Society).

10. *Adjournment.*—The meeting was adjourned at 4:55 p. m. The Committee decided to hold its next meeting in Jackson, Michigan, at a time to be decided by The Chair and Dr. O'Meara.

MINUTES OF MEETING OF PUBLIC RELATIONS COMMITTEE

December 6, 1936

1. *Roll Call.*—The meeting was called to order in Lansing, by Dr. L. Fernald Foster, Chairman, at 3:25 p. m. Those present were Drs. Foster, Bay City; F. T. Andrews, Kalamazoo; C. R. Dengler, Jackson; Wm. S. Reveno, Detroit; A. G. Sheets, Eaton Rapids; and A. V. Wenger, Grand Rapids. Also present were Drs. C. F. DuBois, Alma; B. C. Hall, Pompeii; and J. H. Sherk, Midland. Absent: Drs. W. H. Alexander, L. E. Holly, and F. B. Miner.

2. *Minutes.*—Motion of Drs. Andrew-Wenger that the minutes of the meeting of August 12 be approved as printed. Carried unanimously.

3. *Assignment of Districts to PRC Members.*—Dr. Foster announced the assignment of Councilor Districts to the members of the PRC for which they are to be responsible. The Councilor Districts were assigned as follows:

Districts 12 & 17—Dr. W. H. Alexander
Districts 1 & 16—Dr. W. S. Reveno
Districts 4 & 14—Dr. C. R. Dengler
District 9 —Dr. L. E. Holly
Districts 7 & 15—Dr. F. B. Miner
Districts 6 & 8—Dr. A. G. Sheets
Districts 5 & 11—Dr. F. T. Andrews
Districts 2 & 3—Dr. A. V. Wenger
Districts 10 & 13—Dr. L. F. Foster

Dr. Foster explained the PRC members will be called upon to have charge of the districts assigned to them and to straighten out any difficulties which may arise in these districts.

4. *Projects of MSMS.*—Dr. Foster explained the various projects of the Michigan State Medical Society, and urged the members to study these proposals and be able to speak intelligently on each one. The projects called to the attention of the members of the PRC were Legislation (the Basic Science Law); Economics (Postpayment Plan); County Health Units; Cancer Program; Radio; Mental Hygiene; Maternal Health; Preventive Medicine; Journal advertising and exhibit space at the annual meetings; speakers for lay groups; the Filter System; explanation of non-practice protection; explanation of Ethics Committee; dates of county society meetings in District; supplement in newspapers and the development of the Woman's Auxiliaries. The Postpayment Plan should be publicized to the county medical societies. The different county medical societies will have to develop their own plan to fit in with their own needs. County Health Units: The State Society endorses the county health unit as an administrative unit, but disapproves of units which practice medicine. Radio Programs: It is advised that the radio programs, which are now in progress and will continue for 18 weeks, be publicized in the local newspapers. It was brought out that the greatest problem of the State Society today is the development of the county societies, the election of officers who are workers and willing to spend time for the society.

COUNTY SOCIETIES

ALPENA COUNTY

HAROLD KESSLER, M.D.

Secretary

The Alpena County Medical Society held its Annual Meeting at Alpena on December 14, 1936. Present at the meeting were Drs. Parmenter, White, O'Donnell, Secrist, Newton, Johanson, Kessler of Alpena, with Dr. C. A. Carpenter of Onaway, Dr. Purdy of Long Rapids, Dr. Moffat, and Dr. Monroe of Rogers City and Dr. Gengelbach of Camp Alpena. Guests of honor were the State Officers, Dr. L. Fernald Foster, Bay City, State Secretary, and Mr. Wm. J. Burns, Executive Secretary.

After the minutes had been read and approved, a report of the Ethics Committee was heard, dealing with medical consultation. There was general discussion on the subject with comment by the secretaries, which resulted in the drawing up of a resolution that all members of the society refrain from professional relations with anyone practicing the healing arts, unless he be a legally qualified and licensed M.D. This was adopted unanimously.

Dr. Foster, the first speaker, presented an excellent survey of the efforts of the State Society in behalf of the physician in practice today. He stressed especially that we as physicians must give our wholehearted support to their efforts or they would go for naught. The Basic Science Bill is an example of this, and can be passed only by the united efforts of each physician in the state with his influence solidly behind it. This bill if unpassed will make our state lag in medical progress with the health of our patients improperly protected by our failure. Special emphasis was placed upon the fact that the bill is not a "medical" bill. It will neither harm nor help any practitioner of any school. It will, however, raise the standard of practice of the healing arts in the future.

Mr. Burns, Executive Secretary, centered his talk on the legislative aspects of the physician in the coming session. He enumerated several bills which might arise and explained what aspects might be forgotten or ignored, to the harm of the profession at large. Too often the fourth necessity of life, the care of sickness, is not provided for, and the physician is once more called upon, without compensation, as has occurred so often in the past.

Following these very excellent discourses, the election of officers for the coming year occurred. The following were elected without opposition:

President—C. A. Carpenter, Onaway
Vice President—L. F. Secrist, Alpena
Secretary—H. Kessler, Alpena
Delegate—F. J. O'Donnell, Alpena
Alternate—A. R. Miller, Harrisville

Dues for the coming year were left unchanged, and following the acceptance of applications for membership from Drs. Lister of Hillman, and White of Alpena, the meeting was adjourned.

CALHOUN COUNTY

WILFRID HAUGHEY, M.D.

Secretary

The November meeting of the Calhoun County Medical Society was called to order Tuesday, November 3, 1936, at 8:00 P. M., by the president, Dr. R. C. Winslow, at the Kellogg Hotel, following dinner.

5. *Fee For Filling Out Report.*—Dr. Dengler brought up the matter of making out a report and then signing a certificate which read "I certify that the fee is just and proper," for which a 25c fee was to be paid. Motion of Drs. Andrews-Sheets that all material on this matter be submitted to the Executive Committee of The Council. Carried unanimously.

6. *Revision of Brochure on "Who Wants Socialized or State Medicine!"*—Motion of Drs. Sheets-Wenger that the PRC request the Executive Committee of The Council to authorize the revision of the brochure on "Who Wants Socialized or State Medicine!" Carried unanimously.

7. *Emergency Committee Work.*—The rule which makes it necessary for all committee activity to go through the Public Relations Committee and the Executive Committee of The Council before it is integrated was discussed. It was felt that in emergency cases, when time is at stake, it should not be necessary for the details to go through the PRC. Motion of Drs. Wenger-Reveno that the Public Relations Committee recommend to the Executive Committee of The Council that they approve the activities of any committee which the PRC considers an emergency. Carried unanimously.

8. *Approval of Hospitals.*—Dr. Andrews spoke of the fact that none of the Kalamazoo hospitals are approved by the Michigan Crippled Children Commission for afflicted and crippled child work. Even though they are of fire proof construction, the difficulty seems to be non-approval by the Fire Marshal's Office. Motion of Drs. Dengler-Wenger that this matter be referred to the Executive Committee of The Council at its next meeting. Carried unanimously.

9. *Speaking Dates for State Officials.*—The suggestion was made that the Public Relations Committee arrange, if possible, speaking dates for state officials, who have a message of progress in this state for the information of its citizens.

10. *Radio Talks.*—Five radio talks prepared by the Radio Committee and presented to the Public Relations Committee were approved on motion of Drs. Wenger-Andrews. Carried unanimously.

11. *Adjournment.*—The meeting was adjourned at 5:15 p. m.

Annual Conference of County Society Secretaries

Lansing, Hotel Olds

Sunday, February 7, 1937

11 a. m. to 3 p. m.

Secretaries - Plan NOW to Attend

COUNTY SOCIETIES

The minutes of the last meeting were approved as printed in the Bulletin.

The secretary had communications from the Committee on Maternal Health of the Michigan State Medical Society regarding a questionnaire now being sent out and asking that it be answered and returned; a letter from the W. A. Baum Co., disclaiming connection with certain commercial blood pressure check-ups; a letter from the secretary of Michigan State Medical Society calling attention to medical defense problems, collections, and a plan to handle them, obstetrics survey and dues.

The chairman of the Program Committee made some announcements about the next meeting and introduced Dr. Clyde K. Hasley, dermatologist, of Detroit, who talked, with lantern demonstration, about "Malignancies of the Skin and Mucous Membranes." There were about a hundred very interesting slides. The talk was instructive, fluent, and much enjoyed.

Meeting adjourned. Present at dinner, 40; at meeting, 61.

EATON COUNTY

THOMAS WILENSKY, M.D.
Secretary

On the evening of Thursday, November 19, 1936, the Eaton County Medical Society convened at Carnes Tavern, Charlotte, for its regular meeting. Following the dinner, Dr. T. Wilensky occupied the chair in the absence of President Dr. Meyer who was away on the annual deer hunt. During the business session, considerable discussion was provoked by the question of the advisability of having a full time laboratory technician in the Hayes-Green Hospital at Charlotte. The final consideration in this matter was tabled until the next meeting.

Plans were completed for the annual Ladies' Night entertainment to be held Tuesday evening, December 1, at Charlotte. Dr. Paul Engle reviewed in a very efficient manner Dr. Victor Heiser's book, "An American Doctor's Odyssey," depicting in thrilling fashion how far afield and into what strange situations this man's desire to practice medicine "on the wholesale plan" led him. Dr. Philip Brown's paper, "Medico-legal Aspects of Childbirth Injuries," was, in his enforced absence, read by Dr. C. J. Sevener. Many interesting and rarely considered points of valuable information were emphasized in this connection. The meeting adjourned at 9:30 P. M.

GENESEE COUNTY

C. W. COLWELL, M.D.
Secretary

The November meeting of Genesee County Medical Society was held at Hurley Hospital, Flint, November 12, 1936.

Meeting was called to order by the president, Dr. R. D. Scott. Minutes of the last meeting were read and approved.

The treasurer's report was read by Dr. Vaughn Morrissey and accepted unanimously.

Dr. Henry Cook, as president-elect of the Michigan State Medical Society, gave a brief and instructive talk on Society activities.

Dr. Benson then reported for the Committee on Public Relations.

The chairman of the Election Committee then announced the officers for the coming year:

President—Dr. Alvin Thompson.
President-Elect—Dr. Arthur MacArthur.
Secretary—Dr. C. W. Colwell.
Treasurer—Dr. Vaughn Morrissey.
Medico-Legal Officer—Dr. H. E. Randall.

3-Year Delegate—Dr. Robert Scott.
3-Year Alternate Delegate—Dr. Donald Wright.
2-Year Delegate—Dr. Donald Brasie.
2-Year Alternate Delegate—Dr. Dale Kirk.
1-Year Delegate—Dr. F. E. Reeder.
1-Year Alternate Delegate—Dr. R. S. Halligan.

Board of Directors of the Society: Dr. Alvin Thompson, Dr. R. D. Scott, Dr. C. P. Clark, Dr. R. S. Morrish, Dr. R. S. Halligan.

Meeting adjourned.

TO OUR NEW OFFICERS:

We expect them to dedicate all their efforts toward the betterment of organized medicine. In order to accomplish the most, we must give them our whole-hearted support. The society is as good as its individual members, and there is no reason why we should not have the best county organization within the state.

We have selected men who are capable to lead us. It is a foredrawn conclusion that they will do a splendid job.

JACKSON COUNTY

H. W. PORTER, M.D.
Secretary

The meeting of the Jackson County Medical Society for October, 1936, was held on the 20th of the month at the Hotel Hayes preceded by a dinner at 6:30 p. m. in the main dining room. After the dinner Dr. Dengler turned the meeting over to the entertainment chairman of the evening, Dr. R. J. Hanna, superintendent of the Jackson County Sanatorium, who introduced the speaker, Dr. John Alexander, professor of surgery at the University Hospital in Ann Arbor, whose subject was "Interesting Developments in Surgery of the Chest."

The speaker is so well known locally that the attendance was very large in spite of the fact that many members were absent at the annual fall meeting of the American College of Surgeons in Philadelphia. It would have been a pleasure to give herewith extensive notes on the subject matter that was discussed by this nationally known expert in chest surgery but most of the points were illustrated by slides and the darkness of the room unfortunately made this impossible.

The president announced that the Joint Committee on Public Health Education was planning to sponsor lectures on cancer to various organizations in the county and that the board of directors approved of these lectures. They are to be given by members of the State Cancer Committee before such organizations as the Parent-Teacher Associations, luncheon clubs and other similar groups. The dates and names of the speakers will be sent to the office of the secretary well in advance of each lecture and no special institution will be mentioned as the proper place for treatment.

For the annual medical banquet in December on the third Thursday, Dr. Dengler appointed Dr. Ludwick as general chairman and he has selected as his committee members Drs. Bullen, McGarvey, Hurley, John Smith and E. H. Corley.

The meeting was then adjourned.

MONROE COUNTY

FLORENCE AMES, M.D.
Secretary

Monroe County Medical Society resumed meetings after the summer recess on October 15, 1936.

Dr. Dean C. Denman, Monroe, our delegate, gave an excellent report of the meeting of the State Medical Society.

COUNTY SOCIETIES

The following officers were elected:

President—Dr. O. E. Parmelee, Lambertville.
Vice president—Dr. W. J. Gelhaus, Monroe.
Secretary-treasurer—Dr. Florence Ames, Monroe.
Directors—Dr. R. T. Ewing and M. A. Hunter, Monroe.
Censors—Drs. W. F. Acker and V. L. Barker, Monroe.

Dr. D. C. Denman, Monroe, was elected delegate and Dr. J. H. McMillin, Monroe, alternate for a term of two years at the meeting in October, 1935.

President Parmelee then took the chair. He appointed the following committees:

Public Relations: Dr. D. C. Denman, Monroe, chairman; Dr. M. A. Hunter, Monroe; Dr. W. A. Smith, Petersburg.

Program: Drs. E. C. Long and H. C. Rufus, Monroe.

Dr. E. B. Banister, Monroe, was received into membership by transfer from the Outagamie County (Wisconsin) Society.

The Monroe County Medical Society held its regular November meeting on November 19, 1936, at the Monroe Country Club.

Our president, Dr. O. E. Parmelee, of Lambertville, was in the north, deer-hunting. So, Vice President W. J. Gelhaus, of Monroe, occupied the chair.

Following routine business, Dr. Osborne A. Brines, of Detroit, chairman of the Cancer Committee, gave the illustrated lecture on cancer prepared for the general public by the Joint Committee on Public Health Education. The society was tremendously interested in the presentation and was glad of the opportunity to hear and see it before it is given to the public. Dr. Brines has spoken to us before and enjoys a well-merited popularity with us.

NORTHERN MICHIGAN

GILBERT B. SALTONSTALL, M.D.
Secretary

The regular meeting of the Northern Michigan Medical Society was held at the Hotel Perry, Petoskey, Michigan, at 6:00 p. m., November 12, 1936, with President Engle in the chair. The minutes of the October meeting were read and approved.

Dr. Engle reported for the Indigent Fee Bill Committee which had met with the Emmet County Board of Supervisors. The result of the meeting was an agreement wherein the Board agreed to pay the present welfare fees for house or office calls, mileage of \$.25 per mile in summer and \$.50 per mile in winter from the office, \$35.00 for major surgery, \$15.00 for minor surgery and obstetrics and \$5.00 for anesthesia.

Dr. Mayne reminded the members that welfare mileage of \$.50 per mile after the first 3 miles was still in effect for the winter months and should be so billed.

A vote of thanks to the State Department of Health and Drs. Campbell and Miller for the Refresher courses in Obstetrics presented this fall was passed unanimously.

Due to the fact that Dr. Furlong, the speaker of the evening, was unable to be with us the meeting was turned over to Dr. Saltonstall, who presented moving pictures on surgical subjects furnished through the courtesy of Mead Johnson & Co.

Meeting adjourned.

* * *

On November 23, Dr. Engle appointed our Legislative Committee as follows: Dr. Van Leuven, chairman, Dr. McMillan and Dr. Mayne.

ST. CLAIR COUNTY

GEO. M. KESL, M.D.
Secretary-Treasurer

The St. Clair County Bar Association was host to the members of the Seventh District Dental So-

ciety and the St. Clair County Medical Society on the evening of December 1, 1936, at the Elks' Temple, Port Huron. Supper was served to about one hundred and a very interesting program followed.

Mr. Don R. Carrigan of the Bar Association was toastmaster. Mr. Eugene F. Black, attorney, spoke on "Establishing Proof of Disabilities by Medical Witnesses in Courts of Law." Dr. A. J. MacKenzie spoke upon the long existing cordial relations between the lawyers and physicians in St. Clair County, emphasizing "tact" in not only the giving of but in the eliciting of testimony. Brief talks were made by Dr. T. E. DeGurse of Marine City and Dr. F. V. Carney of St. Clair. Dr. R. W. Bunting of the Dental School of the University of Michigan spoke upon "The Progress of Dentistry." Mr. Clifford O'Sullivan, attorney, stressed the necessity of case study by the lawyer and his medical witness.

The annual meeting of Saint Clair County Medical Society was held at Saint Clair Inn, Saint Clair, Michigan, Tuesday, December 15, 1936. Supper was served to twenty-four members and one guest, Dr. F. E. Ludwig of Port Huron. A resolution was presented to the Society by President J. H. Burley, testifying to the faith of the Society in the efforts being made by Mr. W. W. Ottaway to secure a permit from the Federal Communications Commission for the erection of a radio station in Port Huron and expressing the belief that the same would be of value to the community in health education. The resolution was adopted. Doctor John L. Chester of Detroit, who practised medicine for many years in Saint Clair County, was elected an honorary member of the Society. Numerous communications were read by the Secretary and upon motion placed on file. The minutes of the two immediate preceding meetings were read and approved. The Annual Report of the Secretary-Treasurer was read and approved. A letter was read from Mr. William B. VanValkenburgh, Secretary, Saint Clair County Board of Auditors, giving the following figures: Filter Clinic cost, \$1,093; Cost of Hospitalization and Surgical Treatment at Port Huron Hospital, \$5,141; these expenses covered the period of Dec. 13, 1935, to Dec. 11, 1936. The following officers were elected: President-elect, C. A. MacPherson of Saint Clair; Secretary-Treasurer, George M. Kesl; Delegate to the State Society, A. L. Callery; Alternate Delegate to the State Society, T. E. DeGurse; Censor for three years, A. B. Armsbury. A vote of thanks was extended the retiring President, J. H. Burley, and also to the Secretary-Treasurer, George M. Kesl.

TUSCOLA COUNTY

B. H. STARMANN, M.D.
Secretary

The November meeting of Tuscola County Medical Society was held November 12, 1936. The following officers were elected for 1937:

President—Dr. H. A. Barbour, Mayville, Michigan.
Vice president and President-elect—Dr. L. L. Savage, Caro, Michigan.
Secretary-treasurer—Dr. B. H. Starmann, Cass City, Michigan.

WASHTENAW COUNTY

NORMAN F. MILLER, M.D.
President

The December meeting brings to a close another year for Washtenaw County Medical Society—a year characterized by short, snappy programs, a high average attendance and a commendable esprit de corps. This coöperative spirit particularly characterizes the work of the committeemen, who have

given freely of time and money in carrying on the increasing activities of our organization. Some committees have already discharged their responsibilities, other are still actively engaged with their respective duties. Under the able leadership of Dr. De Tar the Public Relationship Committee has been especially active, and the report of his committee should be of interest to every member. The Committee has been working for you and desires your guidance in continuing its activities.

Desirable changes have been suggested for the administration of our Society and these changes need your endorsement.

The selection of officers for 1937 is one of your more pleasant responsibilities. While such appointments carry many responsibilities and make heavy demands in time and effort, they are also positions of distinction and honor.

Plan now to meet your colleagues at the regular time and meeting place.

Treatment of Atrophic Arthritis

W. Paul Holbrook, and Donald F. Hill, Tucson, Ariz. (*Journal A. M. A.*, July 4, 1936), are of the opinion that the successful treatment of atrophic arthritis is more satisfactorily carried out in a warm, dry climate. Most of their patients have traveled long distances for climatic change and are at least in some measure prepared financially to provide themselves with adequate care. For the underprivileged group of patients, the establishment of hospitals and teaching centers devoted to the care of arthritis, much as it has been done for tuberculosis, appears to be the only solution. A survey of the state of Massachusetts recently revealed that there were more people suffering from chronic rheumatism than from tuberculosis, heart disease and cancer combined. Tuberculosis, cancer and heart disease may cause death, but unchecked arthritis leaves its victims a lifetime of crippling deformity. Almost every state and county has special institutions for the treatment of tuberculosis, yet not a single state or county in this country has such a hospital for arthritis. Finally, a specific cure for atrophic arthritis is not yet available. It is time for the medical profession as well as the victims of this disease to recognize that there is no easy way. The wasting of time and money on measures of doubtful value should be stopped and all time and attention centered on the few simple measures of proved worth. A striking advance in the therapy of this disease can occur if physicians will stop treating these patients half-heartedly with each new remedy as it appears and frankly tell their patients what the problem of adequate treatment includes. Of equal importance is the prevention and correction of deformities. With proper and continuous care from the onset of the disease there should be very few deformities requiring special treatment. Nineteen patients with flexion contractions of knees or knees and hips averaging two and one-half years in duration were submitted to manipulation after conservative measures had failed to correct the deformities. Fourteen of these patients are now walking with straight legs.

"Most true is it, as a wise man teaches us, that 'Doubt of any sort cannot be removed except by Action.' On which ground, too, let him who gropes painfully in darkness or uncertain light, and prays vehemently that the dawn may ripen into day, lay this other precept well to heart, which to me was of invaluable service: '*Do the Duty which lies nearest thee*,' which thou knowest to be a Duty! Thy second Duty will already have become clearer."

—Carlyle.

MICHIGAN'S DEPARTMENT OF HEALTH

C. C. SLEMONS, M.D., Dr.P.H., Commissioner
LANSING, MICHIGAN

PUBLIC HEALTH CONFERENCE

Surgeon General Thomas Parran, chief of the U. S. Public Health Service, was the luncheon guest of President Henry E. Perry and the officers, councilors and committee chairmen of the Michigan State Medical Society meeting in Lansing during the Sixteenth Annual Public Health Conference. Members of the society later heard Dr. Parran deliver the opening address of the Conference on "Syphilis as a Public Health Problem."

More than a thousand members of the health professions and lay organizations attended the three-day sessions of the Conference held November 11, 12, and 13. Included in the official registration of 846 were 84 practicing physicians, 56 health officers, 506 nurses, 14 dentists and dental hygienists, and 56 sanitary officers, milk, food and plumbing inspectors. Every county with the exception of Lenawee and Macomb was represented in the registration list.

Dr. J. D. Brook, Kent County Health Officer, was elected president of the Michigan Public Health Association, succeeding Dr. G. M. Byington. Dr. Brook is a past president of the Michigan State Medical Society. Other officers of the association for 1937 include Dr. Frank A. Poole, health officer of Saginaw, vice president; and Miss Marjorie Delavan, director, Bureau of Education, Michigan Department of Health, secretary-treasurer. Directors include Miss Louise Knapp, R.N., Wayne University; Herbert Hasson, Van Buren county sanitary officer; and Dr. V. K. Volk, health commissioner of Saginaw county.

The following resolution was presented by Dr. Brook, president-elect, and unanimously adopted by the association:

"Because of the prominent position which Michigan holds among the States of the Union as attested to by its wonderfully efficient State Department of Health and its rapidly increasing number of full time health departments brought about through intelligent handling of Social Security funds.

"Therefore, be it resolved that the Michigan Public Health Association in annual meeting assembled hereby expresses its appreciation and extends a vote of confidence to our faithful State Commissioner of Health, Dr. C. C. Slemons, for placing and keeping Michigan in the front rank of public health in this country."

* * *

DICKINSON APPROVES HEALTH UNIT PLAN

Word has been received by the Michigan Department of Health that Dickinson county supervisors have voted to organize a county health department. Official organization of the department is now under way.

The addition of Dickinson county brings the list of counties voting for the county and district health unit plan in 1936 to a total of eleven. Twenty single county units and ten district departments are now providing full time local health protection.

* * *

SEWAGE POLLUTION ABATED

Effective abatement of the pollution of more than 30 miles of the upper reaches of the Grand River will be accomplished with the operation of the new

\$800,000 sewage disposal plant which Jackson has just put into operation. Constructed as a WPA project, this new plant is one of several which Michigan municipalities will open in the near future. Ann Arbor and Muskegon will complete their plants early in the new year. Contracts for the construction of the 20-million-dollar Detroit system, the largest in the state, will be let during December. The completion of this system will protect down-river communities from the present dangerous pollution of the Detroit River.

* * *

PERSONNEL CHANGES

A full time assistant for the promotion of dental hygiene activities has been added to the staff of the Bureau of Mouth Hygiene. Dr. Floyd H. DeCamp will assist Dr. William R. Davis in the educational work of this bureau, making possible an effective extension of field activities.

Dr. DeCamp is a graduate of the University of Michigan School of Dentistry, 1917; served during the World War as a member of the U. S. Army Dental Corps; practiced for seven years in his home state of Idaho and served for two terms as secretary of the Idaho Board of Dental Examiners. He has also served four years with the Detroit Department of Health and five years with the Children's Fund of Michigan, being staff dentist for four years in Oakland county with the latter organization. Dr. DeCamp comes to the Michigan Department of Health after serving as state supervisor for the U. S. Public Health Service during the recently completed health survey of Louisiana.

A reorganization of the Bureau of Child Hygiene and Public Health Nursing has been announced and Mrs. Helen deSpelder Moore, R.N., has been appointed Chief Nurse of the newly created Division of Nursing. Dr. Goldie B. Corneliussen has been appointed as assistant to Dr. Lillian R. Smith, director of the bureau.

Dr. Sue Thompson, formerly with the Michigan Department of Health, is the new director of District No. 2 Health Department with headquarters at West Branch. Dr. Thompson succeeds Dr. Gladys Kleinschmidt at this post.

Dr. Robert B. Harkness, director of the Barry County Health Department, has also assumed the duties of acting director of the Eaton County Health Department. Dr. G. M. Byington, former director of the Eaton unit, has accepted a position with the Detroit Department of Health.

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COMMUNICABLE DISEASE REVIEW FOR 1936

At the time of this writing final totals of reported cases of communicable disease for 1936 are not available, but certain statements may be made as to the relative incidence of different diseases.

The total number of case of scarlet fever for 1936 is expected to exceed slightly that for 1935. However, the real story as to incidence is not revealed in the comparison of number of cases reported during one calendar year with another. On the basis of an "epidemiological year," that is, July 1 to June 30, the years 1934-1935 and 1935-1936 have been relatively low while the year beginning July 1, 1936 promises to be comparatively high. The number of cases each month for the last half of 1936 has exceeded the number for the corresponding months of 1935. It is expected that the incidence for the first few months of 1937 will continue high.

The incidence of diphtheria increased somewhat in certain sections of the state during the latter part of 1935. The year 1936 will be one of the low years, but the number of cases reported will prob-

ably exceed somewhat the reported cases for 1935. A number of deaths from diphtheria have occurred through failure to diagnose cases promptly and to provide antitoxin. In some instances there has been neglect on the part of parents to call a physician, and in others physicians have been "caught napping" due perhaps to the fact that cases of diphtheria occur so seldom.

The incidence of measles has been the lowest on record, following the highest year. Almost 80,000 cases were reported in 1935.

Fewer cases of typhoid fever have been reported in 1936 than for any previous year on record. On the other hand, more typhoid carriers have been discovered. With prompt diagnosing and reporting, prompt follow-up on the part of health officers in order to prevent further spread of the infection, and the discovery of carriers who are the reservoirs of infection, the number of cases should go down with accelerating speed. It is possible to wipe out typhoid fever.

The incidence of meningococcic meningitis is somewhat higher for 1936 than 1935. However, the difference is slight. There has not been the great increase that was recorded in 1935 when the number of cases was approximately twice that reported for 1934. The trend at present shows no apparent increase. The case fatality rate is nearly 50 per cent. The Michigan Department of Health has attempted to place antimeningococcic serum in localities where it will be available to physicians at any time within an hour's notice. However, it is feared that there has been delay in the giving of serum in a number of instances.

Poliomyelitis has been much lower in incidence this year than in 1935. There was a somewhat delayed seasonal peak, the greatest number of cases this year being reported in October.

* * *

ERYSIPELAS IN MICHIGAN

A survey of the prevalence of erysipelas in Michigan conducted by the Bureau of Records and Statistics indicates that during the past ten years the deaths from this disease have decreased from 216 to 94. Although epidemics of erysipelas are rare today, sporadic cases are not uncommon in Michigan. Such cases frequently appear without any known contact with other cases. It seems apparent that there are "carriers" of this disease and that the organism is often present and becomes virulent in cases of wounds, traumatism, recent confinement, and other conditions favorable to its growth.

It is probable that many cases of erysipelas are not reported. In 1935 the Michigan Department of Health received reports of 629 cases which meant a fatality rate of about 15 per cent. This is a much higher rate than actually occurs, indicating incomplete reporting. Regulations of the department require, "Cases shall be reported. Patient shall be isolated until recovery is complete."

The number of deaths reported each year for the past ten years is as follows:

Year	Total	Males	Females
1926	216	112	104
1927	147	89	58
1928	135	87	48
1929	175	97	78
1930	148	78	70
1931	102	62	40
1932	81	43	38
1933	94	53	41
1934	71	45	26
1935	94	57	37
Totals	1,263	723	540

The above table indicates that about 57 per cent of the deaths were males and 43 per cent were females. The age distribution of these deaths shows that infancy is most susceptible. Thirty-one per cent

OBITUARY

of all deaths occur under one year of age, while 35 per cent occur under five years of age. Relatively few deaths are recorded between the ages of 5 to 40, but above 40 the number of deaths increases steadily up to the age group 65 to 69.

The survey indicates a significant seasonal distribution of deaths. The early months of the year show the highest incidence with April having the greatest number of deaths in any one month.

Erysipelas is caused by the micro-organism *streptococcus erysipellatis* which was first described by Fehliesen of Berlin in 1883. His findings were later confirmed by other research workers.

Epidemics of the disease were common in earlier days, particularly in surgical and maternity wards of hospitals. They aroused such fear that cases were frequently excluded from general hospitals and even most contagious disease hospitals made no provision for the care of erysipelas cases.

A better understanding of asepsis has voided this former fear, and modern maternity hospitals are quite free from the disease. Carelessness, however, may easily result in occasional cases which are almost always fatal to parturient women and equally fatal when affecting the umbilicus of new born babies. Good sanitation, good hygiene, and the utmost care in the handling of cases should result in a reduction of the number of cases and deaths from this disease.

SEASONABLE DISTRIBUTION ERYSIPELAS DEATHS 1926-1935

		Total Deaths 1,263			
January	119	May	149	September ..	31
February ...	183	June	104	October	38
March	183	July	60	November ...	72
April	198	August	46	December ...	80

Choice of Analgesics

R. W. Waggoner, Ann Arbor, Mich (*Journal A. M. A.*, Sept. 26, 1936), states that aminopyrine has been most severely indicted for its supposed cause of agranulocytosis. There are still many who are afraid to prescribe this splendid analgesic because of the possibility of harm resulting from its use. The property of producing agranulocytosis may be due to the benzene ring, but many cases of industrial benzene poisoning have been noted without agranulocytosis. It is logical to believe that there may be an idiosyncrasy to the drug, just as there is to many other valuable drugs. It should not be discarded because of the unfortunate reaction in a few cases. Similar criticism of the use of cinchophen and neo-cinchophen has been raised because this drug is presumed to cause liver damage. Studies on experimental animals have not proved that these drugs have a constant specific liver toxic effect even when given in doses far in excess of the therapeutic dose. An analysis of the literature would indicate that these drugs may be prescribed safely when a proper indication for their use exists. Many of the barbituric acid derivatives have been used for the relief of pain. The high comparative dosage of these drugs necessary for analgesic action makes their routine use for such purposes inadvisable. Sensitization to acetylsalicylic acid is said to be frequent among allergic persons. Placing a small bit of the drug on the tongue and allowing it to dissolve will produce itching, cough or asthma in a short time in sensitized persons. The physician should recognize first of all the temperament and personality of his patient and, secondly, the situation, type and severity of the pain, and he should prescribe his analgesic medication accordingly. The narcotics should be used rarely and only in emergency situations, not in those cases in which analgesic medication may be necessary over a long period.

Dr. P. F. Hasley

Dr. P. F. Hasley of Flat Rock, Michigan, died on November 29, 1936, of an organic heart lesion after but a few hours' illness. He was seventy-one years of age and had practiced medicine for more than forty-five years. Dr. Hasley was a country physician, a general practitioner who was revered by a large community who knew him intimately. His wife died eight years ago.

Dr. X. A. Jones

Dr. X. A. Jones of Detroit died suddenly at his home on December 5, 1936. His death was attributed to coronary thrombosis. Dr. Jones was sixty years old. His hobby was shooting. He was the founder and president of the Blue Rock Gun Club and last year he was president of the Michigan Gun Club League. He had returned shortly before his death from a moose hunt in northern Canada. Dr. Jones was a member of the Wayne County Medical Society and the Michigan State Medical Society. He is survived by his widow, Myrta, and a daughter, the wife of Dr. John M. Graff of Detroit.

Dr. Tobias Siegel

Dr. Tobias Siegel of Detroit died on November 23, 1936, at the age of seventy-four years. Dr. Siegel had practiced medicine in Detroit for about a half century. He was born in Germany and educated in New York and in Detroit, where he was graduated from the Detroit College of Medicine. Dr. Siegel's hobby was Esperanto. He pursued it with as much enthusiasm as he did his medical practice, feeling that a universal language would be the shortest road to universal peace. Dr. Siegel's wife died last February.

Acute Mesenteric Adenitis

Charles Stanley White and J. Lloyd Collins, Washington, D. C. (*Journal A. M. A.*, Sept. 26, 1936), state that they had sixteen cases of acute mesenteric adenitis. There seems to be a seasonal periodicity in their appearance, not unlike an epidemic of a communicable disease. The physical examination shows a slightly distended, tympanic abdomen, generally tender and resistant to pressure. While tenderness is marked in the lower right quadrant it is also present in the lower left quadrant. Examination of the throat and chest has been uniformly negative for gross pathologic changes. The blood counts have shown for the most part moderate leukocytosis (from 8,000 to 14,000) but a high percentage of polymorphonuclear neutrophile (from 80 to 95 per cent). The urine shows neither pus cells nor albumin. With such a history of an illness of forty-eight hours or less in duration, scarcely any other diagnosis than acute appendicitis can be entertained, and the patient forthwith is admitted to a hospital and the appendix is removed without delay. With present knowledge of the fulminant nature of appendicitis, especially in children, any other treatment than surgical seems illogical. At the operation the appendix appears in the rôle of the innocent bystander. There is something decidedly unsatisfying in that (1) the diagnosis was inaccurate, (2) it is very possible the patient would have recovered without operation, (3) the pathologic condition remains unexplained and (4) the error in diagnosis in all probability will be repeated, as no differential diagnosis can be established with the present inadequate data.

◆ General News and Announcements ◆

The First 100% Society for 1937!

Muskegon County Medical Society, composed of 70 members, has already gone over the top in two respects:

1. The first County Medical Society to pay 1937 dues for its members.
2. The first County Medical Society to join the 100 per cent club for 1937.

Congratulations to the first 100 per cent component County Medical Society in the New Year.

Dr. Wm. G. Gamble, Jr., of Bay City, spoke before the Bay City Rotary Club on December 15, on the subject "The Mendelian Law and Heredity."

* * *

Dr. A. G. Sheets was elected mayor of Eaton Rapids after a bitterly contested battle. Congratulations, Dr. Sheets.

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A directory of members will be published in May, 1937. Only those who have paid their 1937 dues in full as of April 1 will be listed.

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The Rotary Club of St. Johns heard Dr. Perry C. Robertson of Ionia give a talk on "Psychology and Psychiatry, in a Modern World" on December 15, 1936.

* * *

"Who Wants Socialized or State Medicine!" Copies of this booklet are available to any physician desiring same. Drop a postal to 2020 Olds Tower, Lansing.

* * *

Do you mention our advertising to the detail men?

Do you ask them if they exhibit at the State Meeting?

* * *

Dr. Harther L. Keim, Detroit, spoke before the St. Joseph County Medical Society on January 7, 1937, on the "Diagnosis and Treatment of Diseases of the Skin on the Face and Hands."

* * *

Mr. J. R. Bruce of the Bruce Publishing Company, St. Paul, publisher of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY, was a guest of the Executive Office of the Society on December 1, 1936.

* * *

The use of the word "syphilis" is not restricted in any sense by Michigan Statutes, according to Dr. C. C. Slemmons, Commissioner of Health of the State of Michigan, in a communication to the Michigan State Medical Society dated December 10, 1936.

* * *

Dr. D. D. McNaughton of Argyle was honored by a banquet given him by his fellow practitioners. The banquet was given in recognition of Dr. McNaughton's completion of fifty years of active practice in Michigan.

The Executive Office of the Michigan State Medical Society is maintained for your convenience. It is *your* office. Come in at 2020 Olds Tower when you are in Lansing. You will receive a cordial welcome.

* * *

On January 6, 1937, the Legislature of Michigan convenes in its 59th Regular Session. There are twelve representatives from the Upper Peninsula and eighty-eight from the Lower Peninsula; with three Senators from the northern part of Michigan and twenty-nine from the southern peninsula.

* * *

A large territory is available for a physician to take care of. There is an opening in Breen Township and Felch Township (Dickinson County) for a doctor of medicine. Please communicate direct with Carl O. E. Johnson, Secretary, Farmers' Educational and Co-operative Union, Foster City, Michigan.

* * *

The Journal of the Michigan State Medical Society will be copyrighted each month, beginning with the January, 1937, issue. Thereafter no article may be utilized by other publishers or individuals without the written consent of the Editor of THE JOURNAL of the MSMS.

* * *

Grand Rapids will entertain the 72nd Annual Convention of the Michigan State Medical Society. This convention will be the greatest in the history of the Society. Plan now to attend and enjoy the good things in store for you. The date: September 27-28-29-30, 1937.

* * *

Correction: Dr. R. E. Spinks, Newberry, Delegate from Luce County to the State Society House of Delegates, represented his county at the 1936 Annual Meeting in Detroit. Through error, the name of Dr. Spinks was omitted from the list of Delegates present at the three sessions of the 1936 meeting of the House. Apologies.

* * *

Dr. R. G. Brain of Flint was guest speaker before the Gratiot-Isabella-Clare County Medical Society at the Wright Hotel, Alma, Michigan, on Thursday, December 17, 1936. Dr. Brain spoke on the psychology of handling patients, indefinite diagnoses, prolonged cases and chronic incurables, and mental hygiene.

* * *

Dues for 1937 are now payable. They remain at \$10 as set by the House of Delegates. You become delinquent if your dues are not paid before March 31, 1937. Medico-Legal defense lapses with membership delinquency and does not cover the time between March 31 and the date dues are actually paid. Make sure your Medico-Legal defense does not lapse—pay your 1937 dues now.

* * *

The American Association for the Study of Goiter again offers the Van Meter Prize Award of \$300 and two honorable mentions for the best essays submitted concerning experimental and clinical investigations relative to the thyroid gland. This award will be made at the discretion of the Society at its next annual meeting to be held in Detroit June 14, 15, 16, 1937. For further information address Dr. W. Blair Mosser, Corresponding Secretary, 133 Bidle Street, Kane, Pennsylvania.

The Maternal Health Committee of the Michigan State Medical Society has developed a new film on pre-natal care. Four copies are available for the use of physicians in different parts of the state who wish to give talks on this subject before lay groups. For information, contact Dr. Alexander M. Campbell, 612 Medical Arts Building, Grand Rapids, Chairman of the Maternal Health Committee.

* * *

The Beaumont Foundation lectures held each year under the auspices of the Wayne County Medical Society will be held February 15 and 16. The lecturer will be Dr. E. N. McCollum of Johns Hopkins University. The general title of the lectures is, "Recent Advances in Nutritional Research." Two lectures will be given, the first is entitled "Our Knowledge of Vitamins," and the second, "The Nutrition Problem Involving Inorganic Elements." An invitation is extended to all members of the Michigan State Medical Society to attend these lectures.

* * *

Our error. On page 758 of the November Journal of the Michigan State Medical Society, under Proceedings of the 71st Annual Meeting of the House of Delegates of the Michigan State Medical Society, certain discussion of the annual report of the Liaison Committee with the State Bar is credited to Dr. A. F. Jennings of Detroit. Dr. Jennings states that these remarks were not made by him, so undoubtedly the stenotype reporter made a mistake in recognizing someone else as Dr. Jennings. We are extremely sorry about this error.

* * *

Nathan Hack of the Hack Shoe Company, Detroit, says: "It may interest you to know that whenever a customer addresses me as 'Dr.' Hack, I never fail to tell him that I am not a doctor because I never studied medicine. I am only a shoeman who has made a life study of fitting feet as nearly perfectly as it is humanly possible to do. The shoeman who likes to be called 'Doctor' or at least 'Doc' is a masquerader. His success is generally short-lived. But, these men are harmful to the trade while they last. We must fight them for encroaching upon the medical field."

* * *

Does your County Medical Society wish a talk on

Preventive Medicine?
Cancer?
Mental Hygiene?
Dermatology?
Maternal Health?
Medical Economics?

The above are some of the subjects treated by speakers available through the Executive Office of the Michigan State Medical Society.

When requesting a speaker, will you kindly indicate the exact date, time and place of your meeting, subjects desired according to first, second and third choice, and the possible attendance. Please give the Committee at least two weeks' notice, so that the best talent available will be procured for your County Medical Society, which is not always possible on last-minute notification.

* * *

"State Society Night" was celebrated by the Grand Traverse-Leelanau-Benzie County Medical Society in Traverse City on Wednesday, December 2, 1936. A social hour and dinner preceded the meeting, which was held in the office of Dr. E. L. Thirlby.

The annual meeting of the society, including election of officers, was held. The new officers are:

President—Dr. Dwight Goodrich, Traverse City

Vice President—Dr. Frederick D. Trautman, Frankfort

Secretary-treasurer—Dr. E. F. Sladek, Traverse City

Medico-Legal Adviser—Dr. F. G. Swartz, Traverse City

The retiring president, Dr. J. G. Zimmerman, called upon Dr. P. R. Urmston of Bay City, Chairman of The Council of the Michigan State Medical Society, who spoke on the "Organization of the Michigan State Medical Society." Dr. W. E. Barstow of St. Louis, Councilor of the Eighth District of the MSMS, spoke on "The Duties of a Councilor of the State Society."

Dr. R. C. Perkins of Bay City, Chairman of the Public Relations Committee of the Bay County Medical Society, gave an historical résumé of events in his county leading up to the formation of the first filter system.

Wm. J. Burns, Executive Secretary of the State Society, outlined the "Activities of the Michigan State Medical Society" and explained what the next Michigan Legislature may have in store for the private practitioner of medicine.

The attendance included Drs. T. W. Thompson, L. R. Way, E. M. Paine, E. J. Rennell, C. E. Lemen, Mark Osterlin, F. G. Swartz, H. B. Kyselka, I. H. Zielke, B. B. Bushong, E. B. Minor, R. T. Lossman, R. P. Sheets, J. G. Zimmerman, E. L. Thirlby, Dwight Goodrich, E. F. Sladek, D. F. Weaver, J. S. Knapp, M. Nickols, of Traverse City; Drs. C. I. Ellis and Stewart Jones of Suttons Bay; F. H. Stone of Beulah; E. L. Covey of Honor; F. D. Trautman of Frankfort; Fred Murphy of Cedar.

* * *

Dr. L. Fernald Foster and Dr. P. R. Urmston as well as Mr. Wm. J. Burns, State Executive Secretary, have returned from the Annual Conference of Secretaries of Constituent State Medical Associations of 1936, November 16, 1936, held in Chicago by the American Medical Association. There, Dr. Foster presented the Michigan Filter System, as Secretary of the Michigan State Medical Society. We understand from other sources that it was received with much interest and enthusiasm and we are told that our secretary has been asked to present it to the Tennessee Medical Association in Memphis during the month of May, 1937, as well as other meetings.

We are informed that the conference was presided over by a gentleman from the great State of Arizona, "who enforced order and decorum by means of a six-shooter." No wonder Dr. Foster lost weight but as Southern States were very much in evidence at this meeting, we fear that Dr. Foster is developing a southern accent. Judging by the program, the conference must have been interesting, and it was attended by the secretaries and officers of most of the State Medical Associations of the Union and its possessions.

—Mercy Staff Bulletin, Bay City.

* * *

A few more of your friends who entered technical exhibits at the Detroit Convention of the Michigan State Medical Society, in September, 1936, included:

H. F. Heinz Company, Pittsburgh, Pennsylvania.
Horlick's Malted Milk Corporation, Racine, Wisconsin.
Hospital Liquids, Inc., Chicago, Ill.
The G. A. Ingram Company, Detroit, Michigan.
The Kellogg Company, Battle Creek, Michigan.
Kellogg Corset Shop, Detroit, Michigan.
A. Kuhlman and Company, Detroit.
Lea & Febiger, Philadelphia, Pennsylvania.
Lederle Laboratories, Inc., New York, New York
Lepel High Frequency Laboratories, Inc., New York, New York.

Crippled and Afflicted Child Commitments for November, 1936.

Crippled Child:

Total of 206.

Of the total number 72 went to the University Hospital and 134 went to miscellaneous local hospitals.

From Wayne County (included in the above):

Total cases 71.

Of the 71 cases in Wayne County, 20 went to University Hospital and 51 were cared for in local hospitals.

Afflicted Child:

Total of 1,021.

Of this total, 225 went to the University Hospital and 796 went to miscellaneous local hospitals.

From Wayne County (included in the above total of 1,021):

Total of 298 cases.

Of this total, 19 went to University Hospital and 279 were sent to miscellaneous local hospitals.

* * *

Plans for the establishment of a hundred-bed Jewish Hospital in Detroit were announced on the evening of November 29, 1936, at a meeting at the Hotel Statler. The committee in charge is composed of representatives of the Maimonides Medical Society, the medical staff of the North End Clinic, Phi Delta Epsilon and Phi Lambda Kappa graduate clubs. The speaker of the evening was Dr. Morris Fishbein, editor of the *Journal of the American Medical Association*. In the course of a brief address, Dr. Fishbein commented upon the diminution in number of hospitals in this country today as compared with 1929. This decrease in number, amounting to twelve hundred, affected private hospitals which, Dr. Fishbein predicted, would disappear in the next twenty years. Dr. Fishbein, on November 30, delivered a lecture on "New Forms of Medical Practice" before the surgical section of the Wayne County Medical Society. There was a large attendance limited to standing room only. Dr. Fishbein was introduced to the audience by Mr. Malcolm Bingay, who is an honorary member of the Wayne County Medical Society. Prior to the evening program, a complimentary dinner was tendered Dr. Fishbein at the Wayne County Medical Society.

* * *

The Highland Park Physician's Club held its Eleventh Annual Clinic on December 2, 1936, with a program beginning at 8:30 A.M., continuing through to 5:00 P.M., and winding up with a banquet at the Book-Cadillac Hotel at 7:00 o'clock.

Excellent speakers on subjects covering the field of Medicine were obtained, as a glance at the list will show.

Over three hundred physicians registered and about fifty brought their wives along, the latter being entertained by the Ladies' Committee with luncheon at Dearborn Inn, bridge and a trip through Greenfield Village.

At the evening banquet, Dr. George Crile gave his interesting talk on his recent African Research Expedition illustrated with lantern slides.

On the whole, we think it was a very interesting and highly successful day and we would invite constructive criticism on how to make it better.

Among those who spoke were James E. Davis, A.M., M.D., Professor of Pathology, Wayne University College of Medicine; Arthur J. Bedell, M.D., formerly head of the Department of Ophthalmology, Union University, Albany, N. Y.; Frederick F. Tisdall, M.D., Associate Professor of Pediatrics, University of Toronto, Toronto, Ontario; C. Ander-

son Aldrich, M.D., Associate Professor of Pediatrics, Northwestern University Medical School, Chicago; Louis J. Harris, M.D., Toronto, Ontario; Herman Kretschmer, M.D., Clinical Professor of Genito-Urinary Surgery, Rush Medical College, University of Chicago, Chicago; Dean D. Lewis, M.D., Professor of Surgery, Johns Hopkins University, Baltimore; George Crile, M.D., Surgeon at the Cleveland Clinic; George M. Curtis, M.D., Professor of Surgery, Ohio State University, Columbus, Ohio.

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Monthly Post-Graduate Clinic.

Seymour Hospital, Eloise

On the first Wednesday afternoon of each month, beginning January 6, 1937, from 1 to 5 o'clock, a post-graduate clinic will be held at the William J. Seymour Hospital, Eloise, Michigan, to which all members of the medical profession are cordially invited. One hour each will be devoted to a urologic clinic, a medical clinic, a pathologic conference, and a dermatologic clinic. Cases will be presented by members of the Seymour Hospital staff, and treatment will be stressed. Visitors will be encouraged to participate in the discussions. There will be a five-minute intermission between clinics. The program is as follows:

I. Urologic Clinic. 1-1:55 p. m. Conducted by Dr. W. L. Sherman.

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| 1. Treatment of hydrocele. | DR. S. A. FLAHERTY |
| 2. Treatment of prostatic obstruction. | DR. EDWARD CATHCART |
| 3. Treatment of gonorrhea. | DR. W. L. SHERMAN |

II. Medical Clinic. 2-2:55 p. m. Conducted by Dr. J. L. Chester.

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| 1. Treatment of secondary anemia. | DR. H. A. ROBINSON |
| 2. Treatment of hypertension. | DR. F. A. WEISER |
| 3. Use of digitalis. | DR. M. R. McQUIGGAN |
| 4. Use of crystalline insulin. | DR. S. S. ALTSHULER |
| 5. Review of hypertension cases, Seymour Hospital. | DR. J. L. CHESTER |
| 6. Discussion. | |

III. Pathologic Conference. 3-3:55 p. m. Conducted by Dr. S. E. Gould.

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|---------------------|----------------------|--------------------|
| 1. Neurologic Case. | Discussion opened by | DR. R. T. COSTELLO |
| 2. Abdominal Case. | Discussion opened by | DR. H. J. KULLMAN |
| 3. Chest Case. | Discussion opened by | DR. A. E. PRICE |

IV. Dermatologic Clinic. 4-5 p. m. Conducted by Dr. C. A. Doty.

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| A. Case Presentations: | |
| 1. Therapy-resistant syphilis. | DR. N. H. GOLDBERG |
| 2. Tuberculoid syphilide. | DR. J. R. ROGIN |
| 3. Lymphopathia Venerea. | DR. C. R. HASLEY |
| 4. Metastatic Staphylococcus Infection of Skin. | DR. F. BLUMENTHAL |
| 5. Chronic Arthritis with pustular psoriasis. | DR. C. A. DOTY |
| 6. Lupus Vulgaris. | DR. R. A. C. WOL-
LENBERG |
| B. Microscopic Demonstrations. | DR. H. PINKUS |
| C. Discussion. | |

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Dr. Lloyd L. Ely, formerly of the Lilly Medical Staff, has joined the scientific staff of Frederick Stearns and Company of Detroit. Dr. Ely is a graduate of the State University of Iowa. Following his graduation and internship, he was in private practice in Chicago, during which time he also held a teaching position at the Illinois Medical School, and also the Medical School of Loyola University. He will devote his time to research, which will be carried on at the Frederick Stearns scientific laboratory.

"State Society Night" at Monroe County Medical Society was celebrated on December 17 at the Monroe Country Club. Twenty-five physicians and their ladies attended this meeting and heard the following program:

1. "Greater County Society Activity and Organization" by Dr. L. Fernald Foster, Bay City, Secretary of the Michigan State Medical Society.

2. "What the Next Legislature Means to the Practitioner of Medicine."

(a) "The Basic Science Bill" by Dr. H. H. Cummings, Ann Arbor, Councilor of the 14th District.

(b) "The Physician's Responsibility" by Dr. Philip A. Riley, Jackson, Vice Speaker of the House of Delegates, Michigan State Medical Society.

(c) "Other Legislative Issues of Importance to the Physician," by Dr. L. G. Christian, Lansing, Chairman of the Legislative Committee, MSMS.

3. "Work of the Councilors of the MSMS," by Dr. P. R. Urmston, Bay City, Chairman of The Council.

4. "What Your State Society Is Doing for You," by Mr. Wm. J. Burns, Executive Secretary of the MSMS.

Among those present were: Dr. Florence Ames, Dr. and Mrs. L. C. Blakey, Dr. and Mrs. W. W. Bond, Dr. and Mrs. D. C. Denman, Dr. and Mrs. W. J. Gelhaus, Dr. and Mrs. E. C. Long, Dr. and Mrs. T. A. McDonald and Mrs. Hazel Winchell, Dr. and Mrs. A. H. Reisig, Dr. and Mrs. J. J. Siffer, Dr. and Mrs. R. J. Williams, Dr. Howard C. Rufus, Dr. and Mrs. M. A. Hunter, all of Monroe; Dr. and Mrs. O. E. Parmelee, Lambertville; Dr. and Mrs. Stanley Penzotti, Dundee; Dr. and Mrs. W. A. Smith, Petersburg; Dr. and Mrs. W. H. Stewart, Petersburg; Dr. and Mrs. G. W. Williamson, Dundee; Dr. and Mrs. S. V. Dusseau, Erie; Dr. and Mrs. K. E. Kipp, and Mrs. Pauline Sterling and Mr. Russell H. Clark of Monroe.

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Wayne County Medical Programs—The Wayne County Medical Society has an "all-star" program for January. Beginning with Monday, January 4th, the speaker was Dr. Logan Clendening, clinical professor of medicine at the University of Kansas School of Medicine. Dr. Clendening is more widely known for his books for the educated general reader. He has proved one of the best popularizers of medical science of the present day.

On January 11, Dr. Alice Hamilton of the United States Department of Labor will deal with the subject "New Developments in the Field of Common Industrial Poisons." On January 18, "Studies on the Anterior Pituitaries and Related Glands," is the subject of Dr. J. B. Collip, professor of biochemistry, McGill University, Montreal. On January 25, Dr. Malcolm T. MacEachern, associate director, American College of Surgeons, will speak on "Trends in Medical Practice."

The Wayne County Medical Society has adopted the practice of having some prominent member of the profession introduce the guest speaker. Dr. David I. Sugar, editor of the Detroit Medical News, introduced Dr. Clendening. Dr. C. C. Young

of the Michigan Department of Health, will introduce Dr. Hamilton. Dr. Howard B. Lewis, professor of biochemistry, University of Michigan, will introduce Dr. Collip, and Dr. Alexander W. Blain will introduce Dr. MacEachern.

* * *

Dr. Shurly Commended

The *New York State Medical Journal* of November 25 pays a fine editorial tribute to Dr. Burt R. Shurly of Detroit. The occasion of the tribute is the co-operation of the Board of Education of which Dr. Shurly has been and is a prominent member in the way of making it possible for the study of epilepsy in the Detroit schools. As is probably not generally known, epileptic children of Detroit who are of school age are collected in one central school where they are kept under close medical observation. The editorial in question is timed by the appearance of a paper, *A Study of Epilepsy in Detroit*, by Dr. O. P. Kimball and Dr. D. D. Gudakunst, which appeared in the October number of the *JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY*. Our contemporary cites the presence of physicians in key positions, such as the Board of Education, as to be highly commended. It concludes by congratulating Detroit on the wisdom of selecting a man of Dr. Shurly's standing and attainments as a member of its editorial governing board. "Were more such men in key positions, their influence and guidance might make more acceptable the proposals of sociologists generally." The Detroit Board of Education has been long noted for its awareness of health needs of school population. All the members are equally enthusiastic, not only in the educational demands, but in preventive measures so far as health is concerned.

* * *

To the Memory of Dr. Beverly D. Harison

Dr. Harison was well known to the physicians who entered the practice of medicine following the year 1899. He was in a large way instrumental in bringing about medical legislation which tended to raise the standards of medical practice in this state. Up until his death in 1925, Dr. Harison was well known to those who received their medical licenses during the first quarter of this century.

A bronze tablet was in the process of preparation and was to have been placed in position during the Seventieth Annual Meeting of the Michigan State Medical Society, which was held at Dr. Harison's old home town, September, 1935, Sault Ste. Marie, Michigan. Owing to the incompletion of the work, the placing of the tablet in position had to be postponed. The bronze tablet which has recently been placed in the War Memorial Hospital at the Sault contains the following inscription:

BEVERLY DRAKE HARISON

1855-1925

PROMINENT SAULT STE. MARIE PHYSICIAN.
FOREMOST WORKER IN MICHIGAN MEDICAL LEGISLATION.
ONE OF THE FOUNDERS OF THE UPPER PENINSULA
MEDICAL SOCIETY.

PRESIDENT OF THE MICHIGAN STATE MEDICAL
SOCIETY IN 1904.

SECRETARY OF THE MICHIGAN STATE BOARD OF REGIS-
TRATION IN MEDICINE FOR TWENTY-FOUR YEARS.
ERECTED BY THE MICHIGAN STATE MEDICAL SOCIETY
AND THE CHIPPEWA COUNTY MEDICAL SOCIETY

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THE MODERN TREATMENT OF PNEUMONIA*

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DETROIT, MICHIGAN

A comprehensive discussion of the treatment of pneumonia in the brief period allotted to me is obviously impossible. Only passing mention of certain aspects of the subject will therefore be made, with more concentrated attention given to other, less commonly understood phases of the problem. To facilitate the discussion, I have divided the subject into four principal parts: general measures; medications; specific therapy; and special methods of treatment.

General Measures

The first problem with which one is confronted when called upon to see a patient with pneumonia is that of hospitalization. The objection to moving such a patient is an almost universal one among physicians. It would seem, however, that with our modern methods of transportation, the advantages offered by the hospital, viz., nursing care, oxygen, serum therapy, far outweigh the disadvantages or potential dangers of moving the patient. This is particularly true in the early stages of the disease. On the other hand, if all of the above facilities are available in the home, hospitalization should not be necessary.

A second matter of paramount importance is that of nursing care. The significance of this in pneumonia cannot be overestimated. In this, probably more than in any other disease, good nursing judgment is essential. The key to satisfactory nursing care is probably best expressed in the one word rest. It should be the duty of the nurse to see to it that the patient does nothing

for himself, in order that his energy may be conserved. For this, full time attendance by a nurse is desirable if at all possible, but even the part time attendance afforded by such agencies as the Visiting Nurses Association, Metropolitan Life Insurance Company, et cetera, has proved itself to be of distinct value.

The diet should be a liquid one and fed by the nurse until the patient is definitely convalescent. Inasmuch as the disease is of relatively brief duration, the maintenance of an adequate caloric intake is not of major importance. An abundance of fluids, however (at least 3,000 c.c. per day), is necessary. Iced liquids should be avoided. If the oral intake of fluids is inadequate, then either intravenous or subcutaneous administration should be resorted to. The former is less painful to the patient, but must be given very slowly with a small needle. Too rapid injection of large volumes of fluid in the vein increases the venous pressure with a resulting overburdening of the right side of the heart.

Another matter requiring careful attention is that of the bowels. In the early stages, a laxative should be ordered, and a daily soda or glycerine enema thereafter.

*Read before the annual meeting of the Michigan State Medical Society, September, 1936, Detroit, Michigan.

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Abdominal distention should be combated with use of enemas, rectal tube, stupes, or pituitrin.

Medications

Morphine—Codeine.—The severe pleural pain which so frequently accompanies pneumonia, with its resultant respiratory embarrassment and physical exhaustion, calls for the free use of codeine and, in extreme cases, of morphine. Several objections to the latter are recognized and should limit its use to only the most severe cases. In the first place morphine increases abdominal distention and depresses respiration—effects which should be avoided for obvious reasons. Recent studies have¹ shown that this drug increases cyanosis and will also diminish the oxygen saturation of the arterial blood. Lastly, too much morphine is undesirable because it may totally abolish the cough reflex and thus favor pulmonary atelectasis by plugging of the bronchus with retained secretions. On the other hand, if codeine in combination with the usual analgesics such as aspirin, does not relieve the patient's pain one should not hesitate to use morphine. For restlessness and sleeplessness, bromides or one of the milder barbiturates such as phenobarbitol, are of value.

Digitalis.—The value of digitalis in the treatment of pneumonia is still a debated subject. In a small series of cases reviewed by Burrage and White⁴ only about one third were found to be fully digitalized, but of this number, only 10 per cent died. In contrast to this, the mortality of the remaining, inadequately treated cases was 56 per cent. The authors concluded from this analysis, that if given in full digitalization doses, digitalis is of benefit in the treatment of pneumonia.

In a much larger series of cases (1,450) from the Rockefeller Institute, Cohn and Lewis⁶ concluded that digitalis did not influence the course of the disease itself, but admitted its value in cases wherein auricular fibrillation or auricular flutter had developed. Christian⁵ is of this same opinion.

In a recent study of 835 cases at the Bellevue Hospital (New York), Niles and Wyckoff¹⁰ found the mortality to be higher in the treated group than it was in those who did not receive digitalis. From their studies, they concluded that the routine use of this drug in pneumonia was not justified.

From this brief review of the literature it would seem that the evidence is against rather than in favor of the use of digitalis in pneumonia. In the presence of frank cardiac failure, auricular fibrillation, or auricular flutter, complete digitalization of the patient is indicated.

Quinine.—A discussion of therapy in pneumonia would hardly seem complete without some mention of quinine. There is probably no drug which enjoys such universal use in the treatment of this disease. If given very early there is some evidence that the pneumonia may be "aborted." German literature offers the most optimistic reports, but those of this country have not been so promising. While it is true that quinine is highly bactericidal for the pneumococcus in vitro, there is no proof that it has this action in the human body. While its advocates recommend large doses without regard for the resulting cinchonism, we should all do well to take into consideration the toxic effects which this drug has upon the heart, before we subject it to indiscriminate usage.

Stimulants.—In pneumonia, as in all diseases, there is occasional need for "stimulation." The drugs which have been commonly used in the past are caffeine and camphor. While both have enjoyed wide usage as cardiac stimulants, there is probably no scientific basis for this action. Certainly the cerebral stimulation which they afford is not necessary in pneumonia.

Two other drugs which have been used are strychnine and pituitrin. Warfield¹¹ has recently advocated the former in 1/20 to 1/10 gr. doses, on the assumption that it might reestablish the vaso-motor tone which is thought to be lost in this disease. Any drug which would accomplish this effect is deserving of extensive trial. Pituitrin also promises to fulfill this action and there is limited evidence that when given periodically over the day it may exert a beneficial effect in overcoming some of the peripheral circulatory failure which often accompanies this disease.

Potassium Permanganate.—I include this drug only to point out that it does not occupy a secure place in the armamentarium against pneumonia. There is only inadequate scientific evidence for its value in treating this disease.

Stimulants to the Leukopoietic System.—A suppression of leukopoietic activity as evidenced by a low white count, is usually a bad omen. In a study of 1,220 cases of pneumonia at the Detroit Receiving Hospital 9 per cent (107) were found to have a leukocyte count under 7,000. Of this number 71 per cent died. This is in contrast to a mortality of 49 per cent among those patients whose white blood count was over this value. This, therefore, would seem to offer a very definite problem in the care of the pneumonia patient. Pentnucleotide has had only limited use in such cases, but the results have been promising. Given in doses of 10 c.c. intramuscularly twice a day, it has been observed to raise the leukocyte count to an appreciable degree in several instances. More extensive use of this or similar preparations should be made in an attempt to combat this complication. The advisability of routine blood counts with frequent "checks" cannot be overemphasized.

Specific Therapy

Of the various types of specific therapy which are now in use, it would appear that the one meeting with the widest acceptance at the present time is the use of specific anti-pneumococcus serum prepared according to the method of Felton. In the past there have been two principal deterrents to its wider use. The first of these is the cost of the serum—an objection which will never be removed until the demand for it increases. In consideration of this objection it would be well to point out that the use of serum effects a saving in duration of hospitalization, and that this might well be deducted from the total cost of the serum. During the past two years in Detroit this saving amounted to an average of 2.9 days per patient. The second barrier to a more widespread use of this preparation has been the time and delay involved in the older methods of pneumococcus typing for diagnostic purposes. Fortunately, this latter difficulty has now been largely overcome by the perfection of a method originally devised by Neufeld. The principle involved in this method is based upon the fact that when pneumococci are brought in contact with an homologous type of rabbit pneumococcus antiserum, there occurs, in a very

short time a swelling ("quellung" of the Germans) or ballooning, of the capsule of the pneumococcus. This reaction is highly type specific. By means of this new method the sputum may be typed in not longer than thirty minutes after it reaches the laboratory. Fresh specimens should always be obtained for this purpose.

The selection of patients for serum therapy is based upon three criteria. In the first place, the type of pneumococcus must be one for which a therapeutic serum is available. At the present time commercial antisera may be had for types I, II, V, VII, and VIII. Of these, type I is the most effective. Other type sera, such as type XIV have also been prepared, but there is insufficient evidence as yet of their potency. The second criterium for the selection of patients for serum is the duration of the disease. This should not be longer than ninety-six hours, seventy-two hours or less being desirable. I am told that in one eastern clinic this time limit has been recently extended to five days in type I cases. This would certainly seem worthy of trial in the presence of a bacteremia or in patients who are otherwise critically ill. The third factor is the age of the patient. Children between the ages of two and twelve usually do well without serum, and the danger of horse serum sensitization would hardly seem justifiable. Under two years of age the type of pneumococcus found is usually not suitable for serum therapy. At the other extreme of life, the age limit has been placed at sixty-five by most clinics particularly in type II infections. Patients beyond this age with type II infections rarely do well with anti-pneumococcus serum.

Contraindications.—Only two contraindications to serum therapy are recognized. The first is a state of shock, pulmonary edema or extensive cardiac disease. The second is an allergic history in the patient, indicated by a history of asthma, hay fever, urticaria, angioneurotic edema or eczema. A previous injection of horse serum or a positive skin test also indicate an allergic background and, unless desensitization can be accomplished, should constitute definite contraindications to the use of serum.

Recognition of sensitivity to horse serum is accomplished in one of two ways, viz., by the injection of 1/10 c.c. horse serum

(1-10 dilution) intracutaneously into the ventral surface of the forearm, or by the instillation of one drop into the conjunctival sac of either eye. A positive reaction is indicated by a wheal with a surrounding erythema in the arm test, and an hyperemia with edema and lacrimation in the conjunctiva. With a negative reaction the serum administration may be proceeded with; with only a moderate skin reaction, the patient must be desensitized with small, subcutaneous and intramuscular injections. With a marked skin test or positive conjunctival reaction, serum should not be used.

Administration of Serum: Technic.—With the patient properly selected the administration of serum should be begun immediately. Unnecessary delay must be avoided, inasmuch as a few hours may decide the ultimate outcome of the case at hand. The serum should always be given intravenously unless this is technically impossible or unless the patient is to be desensitized. It may be given directly, without dilution or with varying quantities of normal salt solution. In the former method, only a drop is introduced into the vein, this being slowly and carefully repeated until a few tenths of a c.c. are injected. If no reaction ensues, the continuous administration of the rest of the first dose may then be proceeded with. When diluted, the serum is added to about 200-250 c.c. of warm saline and the whole solution then given very slowly with a small needle. The rate should not exceed 1 c.c. per minute on the basis of the amount of concentrated serum present. Having completed the injection, the patient is observed for a period of 30 minutes for any possible reaction. A syringe containing 1 c.c. of 1:1000 adrenalin should always be at the bedside in the event that an anaphylactic reaction occurs.

Dosage.—The dosage employed varies somewhat with the type of pneumococcus involved and also with the duration of illness. Type II infections usually require more than type I, and cases treated at the 96 hour limit, more than those treated earlier. The usual dose for type I cases is from 80,000 to 120,000 units; type II and VII—160,000 units. Patients with a bacteremia usually require the maximum dosage. It is doubtful whether amounts totalling over 200,000 units have any ad-

ditional therapeutic value, and the use of such quantities is therefore not generally recommended.

It is generally agreed by all that large doses should be given during the first 18 to 24 hours. We have started each patient with 40,000 units and then given 20,000 units every four to six hours. One should not be deceived by a sudden drop in the temperature following the first or even the second dose of serum. A subsequent rise in temperature will usually occur if more serum is not given in four to six hours!

Serum Reactions.—Following the administration of the serum any one of three different reactions may develop. The first of these, the *anaphylactic reaction*, has already been alluded to. This is characterized clinically by wheezing, substernal oppression, cyanosis, et cetera, and usually occurs immediately after the injection is started. It calls for the immediate cessation of serum and the administration of adrenalin at once. The serum should not be attempted again! The second is a *thermal reaction*, which occurs in three-fourths to one and one-half hours after the serum is given. It is characterized by a temperature elevation and chill. Treatment is symptomatic. Adrenalin here is of no value. In the third type known as *serum sickness*, the clinical manifestation of urticaria, arthralgias, adenopathy do not appear until four to ten days after the serum has been given. The treatment is symptomatic with adrenalin and lotions for the urticaria.

Clinical Results.—The most striking symptomatic effect of serum therapy is the decrease in toxicity. This becomes apparent in four to six hours after treatment is started, and is usually more apparent in type I infections. In addition to this, a clearing of the mental state is observed with frequent relief of dyspnoea and lessening of cyanosis. Pleural pain, cough and abdominal distention are not affected.

The temperature effect is dramatic in many instances. A drop of from four degrees to six degrees in four hours is frequently observed. The effect in type II infections is usually less striking. The pulse and respiratory rate follow the temperature closely, the latter being the last to drop in most cases.

The mortality is decreased by at least 50

TABLE I. MORTALITY FIGURES

Type	Number of cases	Mortality Untreated	Mortality Treated	Reduction in Mortality	Lives Saved per 100
I	98	41%	18%	56%	23
II	99	47%	30%	24%	11

per cent in most cases of type I infections, and by 20 to 25 per cent in type II cases. The latter figure has been somewhat variable in different clinics, but with potent serum, the results justify its use. The accompanying table shows the mortality figures in the city of Detroit during the year 1935-1936.

Huntoon's Antibody Solution

This is a solution of pneumococcus antibodies in physiologic salt solution. It is prepared by precipitating out the antibodies from anti-pneumococcus horse serum, and then redissolving them in saline solution. By means of this procedure most of the horse serum proteins are removed, and the dangers of serum sensitization thereby largely eliminated. In the earlier years of its use, however, severe rigors followed its administration. It is claimed that with the more recent product these chill-producing substances have been removed. I have observed the effect of this preparation in only a limited number of cases. While the ultimate results were favorable, severe reactions were encountered in several instances.

Pneumococcus Serum With the Heterophile Antibodies

I have had no experience with this product and I include it only for the sake of completion. The virtue of the combination of heterophile antibodies with the usual protective antibodies which this preparation represents has been seriously questioned by several investigators⁸ during the past year. Suffice it to say, that clinical trial has as yet not been adequate to draw any final conclusions about it.

Pneumococcus Vaccines and Immunogens

There have been several enthusiastic supporters of the use of vaccine in pneumonia.

Barach² was able to show experimentally that immunity could be produced in mice and rabbits by injecting type specific vaccines. This immunity occurred on the third day and increased markedly to the fifth day. Similar results were obtained with bacterial filtrates made from specific types of pneumococci. Lambert⁹ reported on the use of vaccines in 474 patients with an equal number of controls. The preparation used contained mixed pneumococci, influenza bacilli, streptococci and micrococcus catarrhalis, and was given intramuscularly every six hours. In this series of cases, there resulted a mortality of 24 per cent in contrast to 44 per cent in the control group. While these figures seem striking it is nevertheless difficult to understand the logic of this form of therapy. It would seem that the abundance of infection present in the lung of the patient would constitute an adequate stimulus to antibody formation without the added aid of vaccine.

With immunogens I have had only a very limited experience but the objections to its use would seem to be the same as for vaccines. Pneumonia is a relatively short-lived disease and its specific treatment should consist of the administration of passive immunity rather than depending on the body to establish an active immunity.

Special Methods

Oxygen Therapy.—The value of oxygen in the treatment of pneumonia is now an established fact. One need only observe the comforting effect of the oxygen tent on the patient to realize the valuable part which it plays in the treatment of this disease. There is also definite scientific evidence for the need of oxygen in pneumonia. At some time during its course, the oxygen concentration in the arterial blood falls below normal. This fall in oxygen concentration, or "anoxemia,"

is roughly parallel to the intensity of the cyanosis observed in the lips or nail beds. The degree of cyanosis, therefore, constitutes the best clinical guide for the institution of oxygen therapy.

Three methods for administering oxygen are in general use, viz., funnel, nasal catheter and oxygen tent. With the *funnel*, the concentration of oxygen in the nasopharyngeal air has been found to¹ be only 22 per cent, when the oxygen is delivered at the rate of 2000 c.c. per minute. This is obviously inadequate, and the method should therefore be discarded. By means of the *nasal catheter*, the concentration of nasopharyngeal oxygen with the same rate of oxygen flow is 35 per cent. In the absence of an oxygen tent, this method is undoubtedly of some value and should be used. With the *oxygen tent* the oxygen concentration may be accurately regulated so that the optimum 40 to 50 per cent may be obtained. To accomplish this, an oxygen flow of five to eight liters per minute is necessary. High concentration should not be used for any length of time because of the danger of lung tissue damage.

Diathermy.—During the past decade, numerous reports have appeared in the literature on the use of diathermy in the treatment of pneumonia. While there has been some difference of opinion as to the value of this measure, almost all are agreed that it is of definite symptomatic value, and that it is not harmful when properly used. Both the long and short wave diathermy have been used. Wetherbee et al.,¹² in a study of a small but well controlled group observed not only a definitely comforting effect on the patient, but a significant reduction in the mortality in the treated group. With such reports as these, this method of treatment deserves more extensive clinical trial, if for no other purpose, than to add to the comfort of the patient.

Pneumothorax.—This is probably the latest method in vogue in the "Modern Treatment of Pneumonia." While numerous reports have appeared in the literature during the past fifteen years, the total number of cases treated is still too small to draw any far-reaching conclusions. The theories as to the mode of action of this new form of therapy are largely on a mechanical basis.

The interposition of a thin layer of air between the inflamed pleural surfaces is sufficient to relieve the pain and dyspnoea so distressing in this disease. This enables the patient to inhale more deeply and thus more completely oxygenate his blood. A second explanation of the effect of this form of therapy is referred to as the "rest theory." The involved lung is put at rest, with a resulting decrease in absorption of toxic products. The latter is accomplished either by a reduction in the lymph drainage from the involved lung, or by a diminution in the blood flow through this area. The technic employed is the standard one used in any other pulmonary condition. It is generally agreed that large volumes of air 300 to 500 c.c. should be injected frequently to insure and maintain adequate collapse of the diseased area. Blake³ uses even larger volumes, without regard to the production of positive intrapleural pressures. His results appear to be the most satisfactory.

In the selection of patients for this procedure the time duration of the illness is of major importance. The earlier in the course of the pneumonia the collapse is started, the more effective are the results obtained. Unilateral involvement, while not a requisite, is desirable.

The clinical results obtained with this are often gratifying. The symptomatic relief of pain and dyspnoea are quite constant, and if for no other reason than this, its use in selected cases would seem justifiable. The temperature effect is often striking; at others disappointing. I have observed a drop of four degrees to six degrees following the introduction of as little as 300 c.c. of air in several cases. Of the thirty-one patients treated, a complete and permanent return to normal in twenty-four hours was observed in only four cases.

The incidence of extension of the pneumonic process and the development of empyema after pneumothorax has varied in different clinics. In most reports, this does not seem to be a common occurrence.

Finally it must be said that this form of therapy is still too much in its infancy to draw any far-reaching conclusions as to its value. It involves certain potential hazards and, therefore, should not be used routinely

unless thorough familiarity with the technic is possessed by the operator.

Bibliography

1. Barach, A. L.: Methods and results of oxygen treatment in pneumonia. *Arch. Int. Med.*, 37:186-211, (Feb.) 1926.
2. Barach, Alvan L.: Rate of development of pneumococcus immunity. *Proc. of the Soc. for Exp. Biology & Medicine*. 25:558-560, 1928.
3. Blake, F. G., Howard, M. E., and Hull, W. S.: Artificial pneumothorax in the treatment of lobar pneumonia. *Jour. A. M. A.*, 105:1489-1495, (Nov. 9) 1935.
4. Burrage, W. S., and White, P. D.: Digitalis in pneumonia. *Amer. Jour. Med. Sc.*, 174:260-264, (Aug.) 1927.
5. Christian, H. A.: Digitalis in cardiac disease. *Boston Med. and Surg. Jour.*, 187:47, 1922.
6. Cohn, A. E., and Lewis, W. H.: Lobar pneumonia and digitalis. *Amer. Jour. Med. Sc.*, 189:457-482, (Apr.) 1935.
7. Davis, J. S., Jr.: The effect of morphine on the respiration in pneumonia. *Jour. Clin. Investigation*, 6:187, (Oct.) 1928.
8. Finland, M., Rueggesser, Jas., and Felton, L.: Should heterophile antibody be used in the treatment of pneumococcal pneumonia? *Jour. A. M. A.*, 105, (Oct. 12) 1935.
9. Lambert, Alexander: Some effects of vaccines on antibodies in pneumonia. *Trans. Assoc. Amer. Phys.*, 48:73, 1933.
10. Niles, W. L., and Wyckoff, J.: Studies concerning digitalis therapy in lobar pneumonia. *Amer. Jour. Med. Sc.*, 180:348-356, (Sept.) 1930.
11. Warfield, L. M.: The question of the failing heart in acute infections. Presented before the Central Society for Clinical Research, (Oct.) 1933.
12. Wetherbee, W., Foley, J. A., and Resnik, J.: Diathermy in lobar pneumonia. *New England Jour. Med.*, pp. 796-798, (Oct. 24) 1935.

SIDE-STEPPING RESPONSIBILITY—VIA DRUGS*

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DETROIT, MICHIGAN

Human beings are fundamentally so constituted that they will side-step nothing unless it carries in it a challenge. Let us, therefore, at the outset, define responsibility. Responsibility is a social behest. Each of us is beholden to the other. We are actually dependent one on the other. Our dependence on one another is a part of the social order of our existence. Responsibility is an integral part of the society in which we move and have our being. It lays upon us certain obligations toward our neighbor, the community, the state, and the nation in which we live; and, of even greater importance upon each of us individually in his own behalf. Unfortunately, the very moment when in human conduct there is injected, or even implied, an element of compulsion or coercion, we immediately bristle with some indication of resistance, antagonism, or retaliation. At the present time, it is very common for us to be met with the rather juvenile retort, "I don't have to do anything—but die." Trite as such expression is, let it serve to bring to us the query as to the reason for our coming into existence. Why are we here? Not in this room or even in Detroit, but why are we counted as inhabitants of this earth? Our purpose on earth is certainly not resident in death and all that it implies, but rather in the opposite—to live. If, then, it be our purpose to live, and I think it is, it is likewise imperative that we live creditably. Such manner of living is, of course, open to debate. Despite all debate, however, civilization with all the refinements of the centuries as seen in organized society demands that the conduct of

each of us must be acceptable to those about us. Each individual, in the pursuit of his food, rest, shelter, and the expression of his emotions in the field of love and sex, must so conduct himself that his mode of living will be in accord with the majority of the people in his community. Whether its roots be traced into the various strata of biology or sociology, responsibility, in final analysis, is an inherent consciousness of duty to self and to others—an unwritten mandate that we shall so respect ourselves that we shall win the respect and the esteem of others.

How can we side-step our sense of responsibility? How can we lose it? In a thousand different ways. A "sick headache" at a strategic moment is a splendid alibi to help us to escape from an appointment we do not want to keep. The breakfast cup of coffee must be loaded with something akin to dynamite if we are to accept in truth all the sustaining references to it. The cigarette must be a virtual soothing syrup for the nerves if we are to believe the beneficial pronouncements of its many users. The cocktail and the hip flask carry within them the capacity to change

*Read before joint meeting of Detroit Society of Neurology and Psychiatry and Wayne County Medical Society, April 6, 1936, Detroit, Michigan.

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mountains of trouble to sunlit hills of fancy—but Dr. Clark[‡] will tell you about that. All in all, I fear we must admit with the psychologist, William James, that much is dependent upon habit. Whether we be of wheat that has fallen on fertile soil or stony ground, we are always in danger of the tares. Whether our constitutional endowments, our heredity, be the royalist blue, or somewhat shady; whether the environment in which we live is kindly or unkindly, we are, nevertheless, or at least supposed to be, intelligent human beings in the full franchise of our right to choose.

On the morning after the night out, there is aspirin, bromides, bromoseltzer, bromoquinine, chloral, "luminal," phenobarbital, veronal, barbital, medinal, allonal, ipral, and all the other "als." Upon such a background of self-prescribed drugs the indulgent one does not find it hard to resort to another "snort" or possibly a "shot." And, what do we get out of all of this? Mostly, a big headache. What self-deluded slaves of habit we are! Withal, here we are, you and I, assembled to heap condemnation upon those who side-step responsibility. Yet, at this very moment, you and I will do little more, possibly, than to feel a bit ashamed and to mutter, "To err is human." But the force of habit is not through with us.

Dr. Carpenter in 1874 expressed the very kernel of habit when he said: "Our nervous system grows to the modes in which it has been exercised." The very first thing that habit does is to simplify the movements required to produce a given result. Any act becomes easier after it has been done several times. Think for a moment of how you trained your feet when you first learned to drive your car, and how easily you now shift your foot from the accelerator pedal to the brake pedal when you want to stop for a red light. If, in repeating the same act, it were necessary to give each time our undivided attention and a full measure of consciousness, it is evident that all the activity of our lifetime would be absorbed by a few actions. We might be occupied all day in dressing and undressing, and the washing of our hands or the fastening of a button would be as difficult to us on each occasion as it would be to a child on its first trial.

[‡]Dr. David R. Clark, Detroit, Michigan, addressed the joint meeting (loc. cit.) on "Side-stepping Responsibility—Via Alcohol."

Habit, then, is kind in bringing to us the fullness of life. Yet, so subtle and insidious is the expression of its laws that we must be constantly on guard against its many ethical implications and its dangers. The Duke of Wellington is said to have exclaimed: "Habit a second nature! Habit is ten times nature." To this, the veteran soldier and the drug addict alike would attest. Little wonder then that the drug addict is so slavishly enmeshed.

The promiscuous use of aspirin, coffee, intoxicating liquors, tobacco, coal tar drugs, and patent medicines, has its serious dangers, but for the next few minutes let us confine ourselves to a discussion of those addicted to opium, morphine, paregoric, laudanum, heroin, cocaine, and marihuana. You ask the extent of the problem? It is not a problem in our big cities only. It is rural as well as urban. It is not only national, it is international. Drug addicts are a shifting population, hence their total number is at best an estimate.

In 1878 Dr. Marshall made a survey of the State of Michigan in the matter of drug addiction. Because of "the supposed impossibility of getting reliable information of the number of addicts in the larger cities," he omitted Detroit, Grand Rapids, and East Saginaw from his survey. Dr. Marshall's survey on the basis of the State census of 1874 affected a population of 225,633. Among them he found 1,313 addicts, 803 women, 510 men. The population of the whole state at the same time was 1,334,031. If the number of addicts found holds good for the entire population, there were at that time in the state of Michigan 7,763 drug addicts. That was fifty-seven years ago.

Between July 1, 1925, and June 30, 1926, Dr. Charles E. Terry, Executive of the Committee on Drug Addiction of the Bureau of Social Hygiene of New York City, conducted a survey of metropolitan and suburban Detroit, including a population of 1,625,000. He found record of 511 legally supplied drug addicts, and found 734 illegally supplied addicts had passed through the Detroit Police Department during that year. He gave considerable weight to the Detroit Police estimate that there were from 10,000 to 12,000 illegally supplied addicts in the city at that time. Assuming that the low figure of 1,245 (511 + 734) addicts for Detroit holds true for the rest of

the State, there were on the basis of the census of 1930 ($4,842,325 \times .766$) 3,719 addicts in the state of Michigan in 1930. This figure is obviously too low. If the police estimate of 10,000 is taken ($4,842,325 \times 6.153$) the total number of addicts for the state in 1930 would be 29,795. Such figure is obviously too high. Careful studies, such as those mentioned, place the total number of drug addicts for the United States between 90,000 and 140,000. To register most effectively in my memory the approximate number of drug addicts, I say one addict for every 1,000 of the general population is too low and two addicts for every 1,000 is too high. On the basis of such deduction, there are in the United States between 125,000 and 250,000 drug addicts. A *truly* considerable number of side-steppers.

In 1923 and 1924, Dr. Terry made a survey of six cities in the United States to determine the per capita legitimate or medical use of opium and cocaine. From his data collected in Sioux City, Ia.; Montgomery, Ala.; Tacoma, Wash.; Gary, Ind.; Elmira, N. Y.; and El Paso, Texas, he concluded that 8.56 grains of crude opium and 20.79 grains of coca leaf per person were necessary for the annual medical needs of the population of continental United States. In terms of pure morphine and cocaine, that would mean more than six doses of morphine and one dose of cocaine for every person. And, that does not in any way take into account the illegal use of opium or cocaine, nor their use in case of disease epidemics or war. In wholesale language, it would take 72 tons of crude opium and 123 tons of coca leaf to supply the annual legitimate medical needs. Two rather awe-inspiring heaps of pain-killers. Medical T.N.T. for headaches, colics, and pains of every description. Grant, on the one hand, that relief of pain is a comfort and a security in health as it is in disease. You must grant, on the other hand, that such comfort and security if obtained through the use of very dangerous drugs is dearly bought, often too dearly. Is there any danger for people such as you and I? Isn't drug addiction, after all, limited to the weaklings of the race? No, such is not the case. Physicians, lawyers, priests, ministers, dentists, men and women of every profession; men and women of high finance and of high so-

cial position are numbered among the drug addicts. The strong and the weak alike are affected; the rich as well as the poor. In a single Federal report for a period of fourteen months, October 30, 1930, to December, 1931, the Federal Narcotic Law caught in its coils 263 physicians, 12 dentists, 9 pharmacists, 3 osteopaths, and 3 veterinarians, all addicted to the use of narcotic drugs. The number dispensing narcotic drugs illegally was even higher.

Although the knowledge of narcotic alkaloids is probably as old as the use of herbs, morphine as such was first discovered by Sertürner in 1805. The use of morphine by hypodermic needle didn't come about until 1853. Cocaine was first clinically used in 1884. So our problems of drug addiction, as we know them today, are really young and as in youthful problems generally we see many more excuses than corrective results. The biggest and most deeply rooted alibi in the use and the misuse of narcotic drugs is that they are absolutely necessary to the practice of medicine. Without doubt, they have held, and still hold, a very important place in medicine and surgery. Even the American Medical Association has declared them to be indispensable. Their fame then, as killers of pain, should really outrank their infamy as producers of pernicious habits of misery. The ox and the horse were once judged indispensable to transportation. Where are they now? I strongly suspect that the indispensability of the narcotic drugs, particularly those derived from opium and coca leaf, is at the beginning of its decline.

The drug addict that we know most about, the addict who is the basis of newspaper accounts and comments, is the chronic, the end-result of his own degrading habits, a spineless human derelict. He no longer works, yet, he must have from 6 to 60 grains of "stuff" a day. How does he get it? He will stoop to anything and everything to get it. Usually, he practices petty larceny, at which he becomes very clever. He must steal from merchants, from any of us, in fact, \$30.00 to \$50.00 worth of goods daily, for in converting them into cash he is forced to sell them at great discount. With his cash he buys his drugs from the professional peddler. Between you and me and the addict described, there are many gradations. There is a considerable number

of addicts about whom we know very little. They are those that keep their habit under control and can afford it, i.e., they do not rob or steal to maintain their habit. Then, there is that group of addicts that more or less rightfully declare that their habit is due to disease or surgery and the doctor's administrations. Various authorities on the subject state that from 5 to 20 per cent of all drug addicts owe their habit to that cause. In this group are included most of those legally supplied with their drug.

At the outset of this brief review, I emphasized the significance of responsibility in human relationships and stressed the subtle development and potency of habit. In the drug addict all sense of responsibility is lost and habit has enthroned itself as an insatiable demon. How does all of this come about? Limited time forbids details. However, idle curiosity, unfortunate associations, and careless medical ministrations must accept the major blame. The unwillingness to take a dare, and the willingness "to try anything once" are dangerous snares when narcotic drugs are concerned. To the uninitiated, the first small dose of an opiate produces a light sleep, or rather a state of abstraction, or "brown study," pain melts away, the imagination is unleashed at the expense of insight, judgment and reason, time is annihilated, and a mental well-being with pleasurable imagery, often luxurious dreams, shut out the tedium of life. Do we need to explain why the second dose is easier to take than the first? Resolutions and good intentions have little weight in the face of such luxuriant ease. Little wonder then that the drug addict, of whatever class or type, is a luckless, hapless pervert of good intentions. Truly, he merits your thoughtful consideration, and let your thinking be tempered with reason and seasoned with justice.

What is the remedy? Is there any? I think so. We effectively imprison our criminals at least spasmodically and periodically. We efficiently institutionalize our insane. We thoughtfully house and train our mental defectives. We judiciously colonize our epileptics. But, the highly morbid drug addict is left to roam our streets at will. Interested doctors and energetic social agencies spend time and money inordinately in at-

tempting to bring rehabilitation to some new found addict, only to turn him loose again to associate with those who caused his downfall in the first place. Eighty per cent of all drug addicts, known and unknown, live like migratory rodents in the nooks and crannies of our cities and villages. Less than five per cent of these street-dwellers can be reliably rehabilitated. But why spend time, money, and effort on this five per cent, if only to turn them back to the streets again? Even a sound apple placed in the midst of a bushel of rotten ones has a better chance. Regardless of the refinements of methods and provisions, one of the first steps necessary is to house, segregate, and colonize effectively the 80 per cent of addicts above defined. Colonization on an island of adequate size and proper location would be most effective. Keep the streets clear of the despoilers. But, it can't be done. Why? Are there no islands? No! There is no legislation! So that is where the difficulty, the impossibility, lies. Demand the legislation! Get it!! How many of you have asked for it?

The Federal Government under laws approved January 19, 1929, and June 14, 1930, authorized two large federal institutions for drug addicts—one at Lexington, Kentucky, the other at Fort Worth, Texas. The one at Lexington, Kentucky, has been in operation for more than a year. That is not enough. Each and every state should assist in this big project by developing a colonizing institution of their own. Michigan is in a very strategic position to be among the first to do just that. That places squarely upon the shoulders of you and me a responsibility. Are *we* going to side-step it? I very much fear the issue before us will, as President Cleveland once so aptly declared, "lapse into the coma of innocuous desuetude."

Friends, good intentions are useless unless translated into action. Good intentions do poorly on a diet of procrastination. Let not your potent resolutions, your good intentions, die of starvation. Nurture them well and may we meet again—in action.

References

1. Bell, Clark: The medical jurisprudence of inebriety. Medico-Legal Journal, New York, 1888.
2. Cabot, Richard C.: What Men Live By. New York: Houghton Mifflin Co., 1914.
3. Faguet, Emile, and Putnam, Emily James: Dread of Responsibility. New York: G. P. Putnam's Sons, 1914.

4. Giddings, F. H.: *The Responsible State*. New York: Houghton Mifflin Co., 1918.
5. Government Report: *Traffic in Opium and Other Dangerous Drugs*. Report by the Government of the United States of America for the Year Ended December 31, 1931. U. S. Gov. Printing Office, Washington, D. C., 1932.
6. James, William: *Habit*. New York: Henry Holt & Co., 1890.
7. Marshall, O.: *The Opium Habit in Michigan*. Annual Report Michigan State Board of Health, 1878.
8. Terry, Charles E., and Pellens, Mildred: *Preliminary Report on Studies of the Use of Narcotics under the Provisions of Federal Law in Six Communities in the United States of America*. For the period July 1, 1923, to June 30, 1924. Committee on Drug Addictions, Bureau of Social Hygiene, Inc., (Nov.) 1924.
9. Terry, C. E., and Cox, J. W.: *A Further Study and Report on the Use of Narcotics under the Provisions of Federal Law in Six Communities in United States of America*. For the period July 1, 1923, to June 30, 1924. New York, 1927.
10. Terry, Charles E., and Pellens, Mildred. *The Opium Problem*. Committee on Drug Addictions, Bureau of Social Hygiene, Inc., New York, 1928.
11. Terry, C. E., Pellens, Mildred, and Cox, J. W.: *The Legal Use of Narcotics in Detroit, Michigan, and Environs*. For period July 1, 1925, to June 30, 1926. New York, 1931.

THE FUNCTION AND RESPONSIBILITY OF THE RADIOLOGIST IN MEDICAL PRACTICE*

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The new section in Radiology in the Michigan State Medical Society symbolizes the advance of this branch of medicine. Radiology is one of the youngest of medical specialties and it has had to win its spurs. The story of the discovery of the x-ray by Roentgen in 1895 is known the world over. The actual discovery of the x-ray may have been accidental, but, in common with many other great discoveries it happened to one who by training and background was able to recognize it. The actual discovery, however, was the great achievement. Its present value in medicine, however, was made possible by thousands of trained observers who added bit by bit to our knowledge which has made present day radiology possible. While the greatest of credit is due the discoverer and should always be given him, it is well to bear in mind that the use of the x-rays in medicine today is also the product of the radiologist in conjunction with the physicist and the manufacturer of x-ray equipment. Team work by these groups had led to the widening of the use of this agent to a truly remarkable degree and the end is not yet.

The use of the x-rays has been in two fields, viz., diagnosis and treatment. These fields are as different in scope as are surgery and medicine so that many radiologists confine their work to one field or the other. Diagnostic roentgenology from the first attempts at demonstration of the bones of the hand, has proceeded along two channels, radiography and fluoroscopy, until now it is widely used in every field of medicine in the effort toward more accurate diagnosis.

Roentgen therapy began in treatment of the skin and, by a more or less hit and miss method, gradually evolved, thanks to the

physicist and, more dependable equipment, to a better knowledge of the factors which control radiation therapy. Today tremendous voltages are handled safely and understandingly, and x-rays of known quantity and quality are delivered to the patient. Widespread use of radiation therapy has given us an understanding of the reaction of body tissues. The discovery of the fact that some tissues are more sensitive to radiation than others made the treatment of cancer and other conditions possible. Radium, when discovered, added to our knowledge of the structure of matter and augmented the armamentarium of the radiologist in many ways.

The evolution of the radiologist from a medical photographer to a position of a medical specialist and consultant has gone hand in hand with the experience gained by actual use of the x-ray over many years. In the past radiologists have organized in groups for mutual help. The American Roentgen Ray Society established in 1900 has now a membership of 421. The Radiological Society of North America which began in 1915 has now 1114 members. The American College of Radiology established in 1925 has 183 members. The American Radium Society formed in 1925 has 134

*Chairman's address before the Section on Radiology, first annual meeting of the Michigan State Medical Society, Detroit, Sept. 23, 1936.

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members. The American Board of Radiology formed more recently has a limited membership who are admitted on the basis of experience and after a rigid examination. The Section on Radiology in the American Medical Association was established in 1925. Similar societies in foreign countries are in existence. Thus radiology has taken its proper place by steady growth to a separate and distinct medical specialty. It is fitting that on request of the Michigan Association of Roentgenologists the Michigan State Medical Society should recognize radiology as a medical specialty and should have voted for the formation of a section of radiology. We hope that this will result in the dissemination of radiological knowledge through the program and the Journal.

In the early days the x-rays were used in fractures, renal calculi, the location of opaque foreign bodies and a few other conditions. As its use extended gastrointestinal examinations, the visualization of sinus tracts, the retrograde and intravenous urogram, the encephalogram, the diagnosis of non-opaque foreign bodies in the lung, the exact localization of opaque foreign bodies in the eye, the proof of a bowel obstruction, or a ruptured abdominal viscus, nasal sinus, teeth and mastoid study, bone pathology, nearly, if not all, chest conditions. The mere tabulation of all its uses is beyond the scope of this paper. Suffice it that today the list of all possible uses of the x-ray in diagnosis is a formidable one which concerns every field of medicine.

One function of the roentgenologist is to make known to the medical profession the means which radiology possesses to diagnose and treat disease. It need not teach the fine technical points in diagnosis but should, rather, point out where it can be of service. Diagnostic methods have undergone profound change because of it. It is still just as necessary as ever to have a careful history and physical examination and to combine them with sound reasoning. It is our function to point out that certain disease entities are more clearly understood with less chance of error by using the x-rays than by any other means at our disposal. Failure to utilize its help may delay the early diagnosis. Intelligent treatment cannot begin until the problem is understood. Radiologists know that every

field of medicine has need of intelligent help from them in selected cases.

The x-rays also have an equal place in the treatment of disease, and one might say that no single therapeutic agent alone is so helpful in so many different diseases as the x-rays in therapy. The progress of our knowledge in therapy alone has been amazing. The physicist and the radiologist have worked together in solving this problem, one to improve the methods of production of x-rays and to show how to measure them, the other to use each new step to carry on medical research and to compile the experience gained.

Radiology also offers a broad field for research. The possibilities for medical investigation along this line are great and doubtless many new discoveries await investigators who will use it.

One responsibility of the radiologist is to see first that only those properly qualified are permitted to use radiation in diagnosis or treatment. While anyone may purchase an x-ray machine, the use of it without proper medical background and radiological training is accompanied by danger to the patient and himself and the results are often so misleading that radiology is discredited. One does not buy a scalpel and straightway become a surgeon.

Granting, then, that radiology is best served by physicians who have had proper training in this special field, what further responsibility should the radiologist assume? In the first place, he is a consultant. One does not send him a patient and always receive the diagnosis in return. True, the x-ray examination alone may solve the case, just as one look at a patient may at times make the diagnosis plain. But as one can not depend on inspection alone to diagnose all cases in the field of medicine, so an internal inspection by means of the x-ray alone may not be sufficient. The accumulated medical information acquired by means of a good history and physical examination, together with the use of any of the numerous laboratory methods is often necessary so that a proper correlation of these data may lead to the correct diagnosis. The function of the radiologist therefore is to consult with others, and to the discussion add his opinion based on his experience. To do this well he must be a clinician and

an anatomist. Here he has an opportunity to learn from others and he may thus become a clearing house for medical information which should serve to raise the general standard of medical practice.

A further function of the radiologist is to instruct other medical men as to the value of the x-ray in the diagnosis and treatment of disease. He needs not necessarily teach the fine points in x-ray diagnosis but should in his hospital staff meetings or in the county and state medical societies call attention to its value, so that it may be more fully utilized.

He should teach the hospital interne the proper relation of radiology to medical practice. He should present the radiologic method in therapy where it offers equal or greater advantages. This field has often been overshadowed by older methods and an honest comparison should be made. If radiation offers a superior method its use should be upheld whenever the question arises.

In other words, the radiologist should strive to impart his knowledge to others and to learn from them in return. The field of therapy gives him an opportunity to take charge of the patient and when necessary to augment its use by whatever means necessary to accomplish the best result. One seldom hears any more, "give the patient a five minute treatment," but rather "I am referring this patient to you for x-ray or radium therapy, and will dis-

cuss with you any general treatment which may be indicated."

In therapy one frequently needs assistance from the surgeon or internists, and in turn the surgeon often needs the radiologist, in many cases; for either alone to treat the patient would be a grave mistake. Both should work together.

Radiologists in the infancy of their specialty were often enthusiastic in reporting their results but men in the older specialties were quick to correct any overstatement, so that we have come to recognize that results must be proved before they can have lasting value.

The radiologists in the Michigan State Medical Society are proud of the achievements of radiology. We have been received individually and collectively as consultants in medicine. We are grateful to the Michigan State Medical Society in honoring us by the creation of the Section on Radiology. There can be no doubt that both radiologists and the profession at large will profit by this action; one by being accorded recognition, and the opportunity of disseminating radiologic knowledge and the other by the opportunity to know more fully in what ways radiology may add to the proper diagnosis of disease and its value in therapy. This section, I am confident, will endeavor to measure up to the high standards set by the older groups and will strive to bring to the medical profession of Michigan the best that radiology has to offer.

SPONTANEOUS HYPOGLYCEMIA IN THE VAGOTONIC INDIVIDUAL

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It may be rather presumptuous on my part to discuss hypoglycemia and its possible relations to imbalance of the autonomic nervous system, but because of having come in contact with a number of cases that have suffered in various ways with this disease, I feel it worth while to offer this paper. The use of insulin and modern methods of estimation of blood sugar have led to a better understanding of carbohydrate metabolism, but nevertheless our knowledge is far from complete. For instance, we find that one individual may have a low blood sugar without symptoms and another may have all sorts of unpleasant and even dangerous symptoms.

Schur and Taubenhaus⁵ mention three factors that may produce spontaneous

hypoglycemia: (1) Increased insulin formation resulting either from a quantitative increase in the islands of Langerhans or from hyperfunction of these islands; (2) disturbance in the counter regulation by hormones; (3) disturbance in the mobiliza-

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tion of glycogen. Cannon's² discussion of homeostasis of blood sugar reveals a complicated regulatory mechanism, and calls attention to the prominent part played by the autonomic nervous system. No two individuals present the same degree of relative

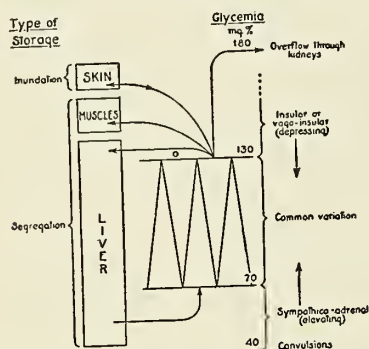


Chart 1. Diagram illustrating the action of agencies which preserve homeostasis of blood sugar.

From the *Wisdom of the Body* by Dr. W. B. Cannon, courtesy of the publishers, W. W. Norton and Company, New York.

balance of stability of this system. Hence the variations in the regulation of the carbohydrate metabolism and the blood sugar level. In connection with this we must also consider its relation to the endocrine system and their combined effect on the body chemistry.

In this discussion I shall limit my remarks on hypoglycemia to the functional or spontaneous type. Insulin is essential in the utilization and storage of blood sugar and is considered a secretory product of the islands of Langerhans. Since its therapeutic use in diabetes, hypoglycemic attacks from an overdose of insulin have been recognized. Later, similar symptoms noted in patients who had not had insulin led to the study of blood sugar levels and the recognition of hypoglycemia.

The optimum level for blood sugar is 100 mg. per 100 c.c. of blood, with a range between 80 and 110. When the level drops to 70, symptoms such as slight discomfort, hunger or sweating may occur, and at receding levels, tremor, incoordination, weak, irregular pulse, chest discomfort, dyspnea, unconsciousness and even convulsions. This unusual variety of symptoms may be due to imbalance of the autonomic system and its devious influence on body chemistry and nervous reactions may account for the wide range of symptoms noted. Cannon² presents evidence that the autonomic nervous system

is a factor in controlling blood sugar level. The sympathico-adrenal system being opposed to the action of the pancreas aims to maintain blood sugar at an optimum level. If its influence is eliminated and the vagus stimulated there is a consistent lowering of the blood sugar—in other words, the sympathico-adrenal side calls the blood sugar from storage to maintain a proper supply. If it fails, then the influence of the vagus on the pancreas stimulates secretion of insulin and overdosage occurs with resulting hypoglycemia. Cameron¹ visualizes the relation between the vagus and sympathetic as a "tug of war by each party responding by increased effort to the efforts put out by the other."

During the last few years I have found a number of patients with attacks similar to those described as insulin shock or hypoglycemic reactions. The symptoms range through a considerable portion of those above mentioned. They have all been individuals who have passed through much anxiety and worry over long periods of time with final appearance of exhaustion and the hypoglycemia. These attacks come on at irregular intervals and are usually precipitated by undue physical effort with perhaps some unusual anxiety or worry, as a result of which symptoms of hypoglycemia develop, such as weakness, sense of hunger, irregular heart and the like. The majority of my cases happen to present circulatory symptoms as the chief complaint, and worry. However, the fact that none of them exhibited any physical or cardiographic evidence of heart disease prompted search for other causes for these attacks. The chief factor leading up to the attacks seemed to be fatigue from physical effort such as prolonged shopping and undue anxiety with loss of sleep. Such a condition leads to overactivity and fatigue of the sympathico-adrenal system, resulting in a drop in the blood sugar to the point where stimulation of the vagus further reduces blood sugar, precipitating the more serious symptoms of hypoglycemia. In our study of these cases it was noted that nearly all exhibited an arterial hypotension, a minus metabolism and fatigue, suggesting a tendency to sympathicotonia followed by a stimulation of the vagus and resulting in vagotonia. Sugar tolerance curves revealed a rather sudden drop in sugar level and at this point

many expressed the fear of an impending attack, and almost invariably they were insistent on resting during the remainder of the period required for the sugar tolerance test. The curves revealed a moderate increase in sugar with this period of rest and

the rest of the observation, and with it gradually recovered from these milder symptoms.

Case 2.—C. N., salesman, aged forty-six, experienced worry and anxiety over a period of two years, because he had lost his business early in the depression. On account of his economic situation and the responsibility of his family, he finally devel-

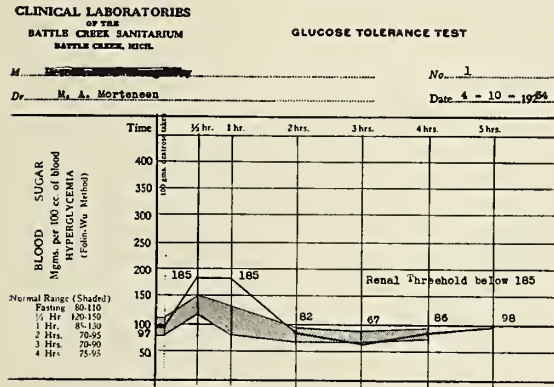


Chart 2. Case 1. Glucose tolerance test.

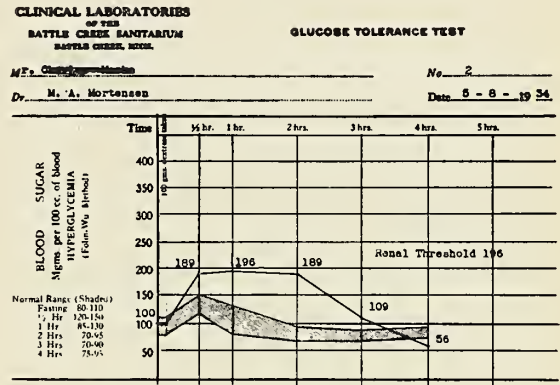


Chart 3. Case 2. Glucose tolerance test.

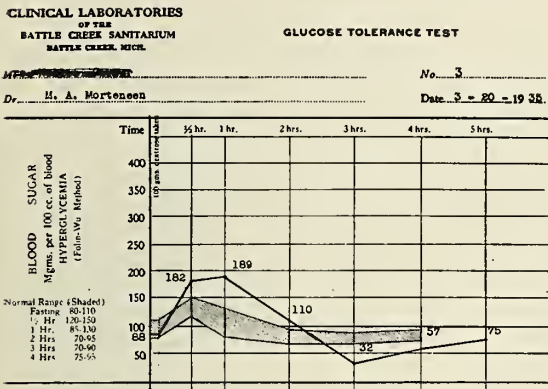


Chart 4. Case 3. Glucose tolerance test.

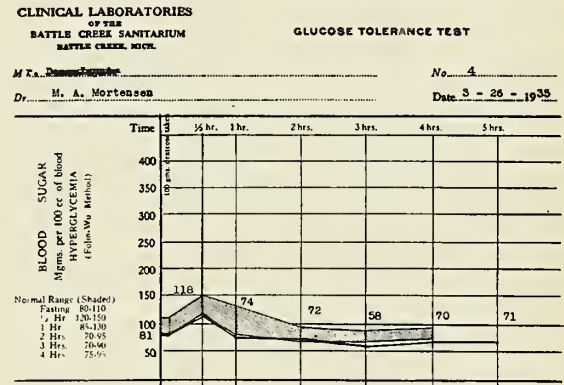


Chart 5. Case 4. Glucose tolerance test.

disappearance of weakness and fear of the attack, suggesting the response of the sympathico-adrenal side of the autonomic system.

Case 1.—C. P., physician, aged forty-one. Early history was unimportant clinically. The patient led a very strenuous life professionally and indulged in championship contests of swimming and tennis. For some years unusual anxiety and worry added to his usual duties with nervous exhaustion. Three and one-half years ago he experienced a tight sensation in the chest, with weakness and fatigue after exercise. As time went on discomfort came on more frequently and with less effort, and with it irregular heart and at times a bradycardia as low as 30. With half an hour's rest symptoms usually disappeared except weakness and increased anxiety about his condition. Myocarditis had been diagnosed. Examination: No evidence of heart disease. Cardiogram normal. Sugar tolerance curve 97-185-185-67-86-98. At the point where sugar was at 67 he developed weakness, irregular heart and insisted on lying down through

oped attacks of sudden weakness, shortness of breath, flatulence with marked distention of the stomach and colon, with pain in the left side. After the first attack another one occurred that was more severe and with pain radiating into the left arm. He was advised that he had angina and was given amyl nitrite. Anxiety over this condition added to that above mentioned, increased the frequency of the attacks to an almost daily occurrence. Examination: Obese. Cardiac findings negative. Blood pressure 110 systolic; 75 diastolic. Cardiogram normal. Unusual distention of the stomach and colon. Aerophagia was noted. Sugar tolerance curve 100-189-196-189-109-56. At the third hour he began to anticipate trouble and at the fourth complained of chest discomfort, weakness and sweating.

Case 3.—N. G., housewife, aged 73. Past history was essentially negative except that the patient always has been inclined to be on a nervous tension. She complained of weakness, palpitation, irregular heart varying in intensity and duration. She was fearful of heart attack. In one attack of two hours' duration, she fell to the floor but remained con-

scious. She had chest discomfort and dyspnea. Examination: Blood pressure 130 systolic; 75 diastolic, pulse 70, regular. Heart normal. Cardiogram normal. Basal metabolic rate -12 and -14. Sugar tolerance curve 88-182-189-110-32-57-75. During the test the patient insisted on remaining in bed but at the third hour felt very weak, heart irregular and was fearful of an attack.

Case 4.—D. J., male, musician. Previous history was negative. Chief complaint: Twelve years ago he had attacks of weakness and fainting on arising. These came on perhaps no more than once a year for a number of years, sometimes at intervals of eight months. The past two years he has worried a great deal because of lack of employment and finances. Attacks much more frequent and severe and with twitchings, unconsciousness and at times convulsive seizures. In this case attacks came in the latter part of the night or on arising, with no trouble during the day. Examination: No physical evidence of disease. Sugar tolerance curve 81-118-74-72-58-70-71. Note the difference in the sugar curve here and in the preceding ones. This type of curve leads to the suggestion of organic changes in the pancreas or in other parts of the endocrine system.

Management

1. Our effort in the management of these cases was directed towards the elimination of anxiety and worry with associated nervous tension, which, if accomplished does much to establish a better balance of the autonomic nervous system. Some cases need relief from their usual environment for a few months to accomplish this. In the first case this was advised, together with a program of moderate activity to eliminate undue fatigue, and a dietetic regime, and this relieved him entirely of his difficulties.

2. Dietetic program. Modify habits of eating, advising food between meals. Some may need food at bedtime and others immediately on rising. I have usually recommended a low carbohydrate diet with increase in protein and fat and have usually obtained satisfactory results. We have always advised against the use of concentrated sweets unless in emergency and then only in small quantities.

3. A mild sedative may be necessary for

a short time to insure proper relaxation and rest. Thyroid extract is useful in cases with low metabolism, and in some cases we have added suprarenal extract with apparent benefit. The suprarenal extract usually was given in doses of from two to six grains three times daily. I have not tried the use of small doses of insulin after meals as suggested by John.⁴ Patients have a decided aversion to the use of the hypodermic, but this should be tried if results of the above measures are not satisfactory. In Case 4 surgery was considered, but when the patient was not worried by finances, etc., and followed the dietetic program, his weakness and convulsions were satisfactorily controlled.

If we scrutinize our chronic invalids carefully, especially those that have been diagnosed as neurasthenic, we shall find some in whom spontaneous hypoglycemia can account for the major symptoms. In the study of our vagotonics, a sugar tolerance test may reveal a tendency to hypoglycemia. The term hyper-insulinism as introduced by Seale Harris³ may include other types of hypoglycemia and may need an entirely different type of treatment. In my experience the spontaneous type can be managed very nicely by rest, modification of dietetic program and perhaps some endocrine medication. If these patients can be taught to lead a more leisurely type of life, their difficulties may be entirely overcome.

References

1. Cameron, D. E.: *Objective and Experimental Psychiatry*. New York, Macmillan, p. 161, 1935.
2. Cannon, W. B.: *The Wisdom of the Body*. New York, Norton and Company, 1932. (Chapter 6: Homeostasis of Blood Sugar.)
3. Harris, Seale: Nomenclature of disorders of insulin secretion: diabetes mellitus, hyperinsulinism and dysinsulinism. *Ann. Int. Med.*, 7:1084, 1934.
4. John, H. J.: Hyperinsulinism. *Med. Clin. North America*, 17:979, (Jan.) 1934.
5. Schur, M., and Taubenhaus, M.: Pathogenesis, clinical aspects and surgical treatment of spontaneous hypoglycemia. *Ztschr. f. klin. Med.*, 128:223, (June 25) 1935.

EARLY DIAGNOSIS IN TUBERCULOSIS

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The best method of stamping out tuberculosis would be routine examinations of the entire population; however, objections to this are obvious. The next best, which is now being carried on by the Detroit Public Health Department, is complete examination of all contacts and suspects. However, there will always be many thousands of unknown contacts. It is with this group that the general practitioner must grapple, in order to stamp out tuberculosis. For this reason, I have attempted to present the symptoms appearing early in the disease, so that a basis for a chest x-ray examination can be laid. Too often the stethoscope has rerouted the path to an x-ray. To wait until the patient comes in with hemoptosis, is giving the tubercle bacillus a long start. An early diagnosis of tuberculosis depends on a thorough understanding of the first symptoms appearing during the development of a parenchymal lesion. Unfortunately these early symptoms are chiefly subjective, and of such variable intensity that the patient frequently is unaware of the presence of the disease.

The clinical picture of tuberculosis may be divided in two parts, first; those symptoms which are due primarily to absorption of the tuberculous toxin (subjective), and secondly, those due to actual destruction of tissue (objective). The subjective symptoms will present a variable reaction in individuals depending on the amount of toxin absorbed and the individual resistance to the first infection. These may be classified as affecting the (a) Vasomotor System, (b) Nervous System, (c) Muscular System, and (d) Gastrointestinal Tract.

Vasomotor System

The vasomotor effects are chiefly peripheral. Slight flushing of the malar eminences occurs associated with increased activity, and persists during the later stages of the disease. There is a disturbance in the heat regulating mechanism of the body. Temperature becomes subnormal and there are frequent paradoxical thermal effects associated with the slightest activity either mental or physical. The patient will experience a marked sensation of warmth over any part of the body but the face and neck are the most usually affected. He will

suggest that the windows be opened, while other persons in the room will feel that the room is cool. Then again, he may feel slight chills when the room temperature is very comfortable. In the beginning, these sensations are readily modified by rest and exercise and are the earliest to appear. As the disease progresses, they become prolonged and more severe, until the classical picture of afternoon fever and night sweats is present.

The Nervous System

The changes in the nervous system are even more subtle than those affecting the vasomotor system. Very early in the disease these develop an increased tension throughout. This manifests itself by hyper-irritability, impatience, irksomeness, and inability to relax. Petty details and hindrances which were formerly overlooked, become magnified. The individual always wants to do something or to go somewhere. The disease produces an intoxication which result in turn in a mild exhilaration the *spes phthysica* so called. With progression of the disease these symptoms give way to marked nervousness and insomnia.

Muscular System

The prominent feature of the muscular system is fatigue. When it makes its appearance after a routine day's work, the average person believes that he has either been working too hard or that he has stayed up too late. He may go to bed early for a few days and feel greatly improved. He may have an opportunity, also, to rest in the afternoons; or he may decide to take a week's vacation. Rest, for the time being, eliminates the effects of fatigue, but the time soon approaches when an hour's or a day's rest is not sufficient. Going to bed early

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fails to give the required rest, for the patient awakens in the morning just as tired as if he had already done his day's work. As the disease progresses, fatigue gives way to marked weakness and exhaustion.

Gastrointestinal Tract

Subjective symptoms from the gastrointestinal tract in the early stages are frequently absent. The most common symptom is loss of appetite. The individual person begins to eat sparingly and develops aversions to various articles of food. At times, he may have attacks of nausea or severe epigastric distress and he is apt to blame the food which was eaten at the time. A constant feeling of hunger develops when few mouthfuls usually suffice; or just the odor of food may turn the patient's appetite.

As the disease progresses, the cecum may become involved, producing a pseudo appendicitis; and not infrequently an appendectomy is performed prior to a chest x-ray.

One early objective symptom consists of a dry non-productive cough, commonly spoken of by the layman as a "cigarette cough." It may appear very early in the disease for from a few days to a week, and then disappear at irregular intervals, to be forgotten by the patient. It is usually initiated by a slight tickling sensation in the throat. It may be associated with a prolonged cold, or it may come on in the evening, or after arising in the morning. Later on, it becomes productive and deep.

A pleural pain which varies from slight needlelike sensations, lasting only a few seconds to a definite soreness which may persist for days is often present as an early symptom. Its relation to respiration is variable. Any part of the chest is susceptible. There is nothing specific about

these sensations, so that they are frequently overlooked by the patient.

Third and last are the slight muscular tremors which involve the chest muscles most frequently, but may occur anywhere. These are also of such insignificance as sometimes to be overlooked by the patient. Up to this point, the clinical course of the more common insidious chronic form of tuberculosis has been discussed. However, tuberculosis may occur with an onset that does not appear to be more serious than a common cold. This form usually has an acute onset, and is accompanied by slight fever and malaise. The pulse rate is much higher than the fever warrants. The patient usually complains of having had a cold which "hung on."

The stethoscope is of little value at this time, for this type of lesion does not produce the consolidation signs as seen in pneumonia. An alteration in the breath sounds is frequently the only clue to the pulmonary lesion. If an x-ray examination were made, an acute exudative lesion would be seen. This differs from a pneumonia by the absence of resolution long after a true pneumonia should have run its course, together with the general appearance of the patient, who seems to be having nothing more than a cold. After a few days to a week, he returns to work. A few months later, hemoptysis may arouse the patient sufficiently to consult a physician.

In summing up the early clinical picture in tuberculosis, we can readily see the difficult problem presented to the general practitioner. There is not one group of symptoms that can truly be said are pathognomonic of tuberculosis. The physician must ferret out the minor details, which are frequently insignificant to the patient, and evaluate them as a whole.

TREATMENT OF OCULAR INJURIES*

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It is interesting to review medical opinion on any subject. To follow the reasoning and facts presented by the majority and minority is as instructive as diving into the arguments of a national election. When we are teaching, or when treating a patient, we must be decisive and even dogmatic. Tonight, without patients, we can discuss among ourselves some of the points pro and con of the treatment of injuries in our field.

It is not our purpose to consider here the many kinds of accidents in civil and industrial life, in driving and in sport, that daily take their toll of eyes, nor to itemize the types of damage, major and minor, that may be produced. We all know how each day brings its unexpected loss of vision to some victim; we all know that a minor blow can ruin a normal eye. Let us then investigate important points in the care of such patients.

Starting with lacerations of the brow and lids, we meet our fundamental precept: our efforts are aimed primarily at a restoration of function and vision, but next in importance we must strive for a good cosmetic result. To this end, after thorough cleansing, the skin tear should be made as straight as possible, and preferably in the line of the natural skin folds; the hairs of the brow must be restored to their normal direction; and sutures should not be too tight.⁴ To get a good restoration of torn parts takes study, and time. But it is better to do a good job at the first operation, than to be faced with the necessity of doing secondary operations in a scarred field, at a later date. General surgical principles apply. One must aim for the greatest cleanliness, use drains if indicated, deep buried sutures to take up tension, and fine dermal or silk for the surface.

Frequently tears are at the inner canthus, and sever the canaliculus. If seen within a few hours, good repair of the canaliculus is often possible. The torn nasal end of the canaliculus must be located and dilated. The lateral portion is dilated from the punctum nasally, revealing the other torn end. The wound is then closed, with either

a silk suture, running from the punctum through the canaliculus and out through the top of the sac, or a probe, lying in the canaliculus. These must be left in situ for several days.

It is well, when the lid is torn through, to suture the margin first, or at least place that suture, then the conjunctiva, and later the outer skin. A silk mattress suture, one arm on each side of the tear, tied externally over rubber or gauze, aids in taking up tension. Marginal sutures must be removed early, to prevent notching. Excise nothing, and maintain the ciliary line.

One should make a rule of invariably making a careful examination of the globe after any injury, however slight, especially after blows. This should include an ophthalmoscopic examination.

In penetrating wounds into the orbit, be careful to look for and remove foreign bodies, especially wood. Many men have run into bad luck with penetrating wood fragments, causing tetanus and meningitis. Orbital fractures must be looked for, with free use of x-ray, and dislocated fragments, if large, sutured into position. Sometimes an orbital hemorrhage must be drained to prevent pressure atrophy.

For corneal lacerations, we all agree that a conjunctival flap is usually necessary. Presence of a foreign body inside the eye must first be checked, and a prolapsed⁶ iris or ciliary body must be replaced, or the former excised. Foreign protein is often indicated in treatment, some of us using milk, but the majority favoring intravenous typhoid vaccine. Corneal ulcers must be actively treated, for more eyes are lost in many industries from infected ulcers than from perforating injuries.⁸ As a cautery, carbolic acid is still popular. Half strength

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tincture of iodine and trichloroacetic acid are also good. Stubborn cases demand the actual cautery. Many men like the thermophore.

On the treatment of chemical burns of the cornea and conjunctiva we do not agree.¹² Some feel that acid and alkali burns should be neutralized. Others, supported by experimental evidence, feel that free irrigation with large quantities of water does as well in stopping chemical action, and with less damage. Many men irrigate first, then try neutralization. Others feel that the cornea is no place to carry out a chemical reaction, even though with good intent. Certain it is that if neutralization is attempted, it should be done with only very mild and weak solutions, unlike the technician who counteracted 1/10 normal sodium hydroxide in her eye by instilling 1/10 normal hydrochloric acid.¹

All foreign bodies, especially lime, should be meticulously removed, the eye freely washed, an anesthetic instilled, and the cornea stained with fluorescein to determine the extent of the damage. Alkalies are more dangerous than acids. Ammonia is the worst of all chemicals. A few chemicals have a more or less specific therapy. Glycerite of tannic acid applied with a moistened applicator is recommended for soda, ammonia, and other alkali burns. For lime burns, 10 per cent neutral ammonium tartrate is widely used, as an irrigation, and then as drops for several hours. The anterior chamber should be emptied promptly in ammonia burns, since that chemical rapidly diffuses through the cornea into the aqueous. Tear gas (chloroacetophenone), as vapor is harmless, though it causes such irritation and burning that the eyes cannot be opened sometimes for twenty-four hours. The actual solution in the eye is a different story, and may cause irreparable damage from corneal scarring. The drug is insoluble in water, so the usual free irrigation should not be used. Instead, a 0.4 per cent solution of sodium sulphite in 75 per cent glycerine and water should be used freely.⁹ Sulphur dioxide, as from a refrigerator, should be thoroughly washed out with water, then with sodium bicarbonate in 75 per cent glycerine.

Prognosis must always be guarded, even days after the accident, and symblepharon

must be prevented. The usual method is to keep the cul-de-sac well anointed with oil or ointment, and passing a glass rod around the fornices at least once daily. Stanford of Memphis finds the insertion of the membrane of an egg the most effective preventive he has seen.¹⁰

Most men agree that the oxidized ring in the cornea after a superficial foreign body has been removed, should itself be completely removed, though many writers give no reason for this. Presumably the majority believe that leaving the ring is conducive to slough and infection. This might be questioned, and, certainly, often vigorous attempts to remove it cause more scar than leaving it. The foreign body should of course be removed, trying only a moist applicator first, resorting to a spud if indicated. Good light and magnification are essential. A dental burr is best for removing with smooth edges any remaining stain or oxidized material. It is often well to touch the defect with phenol, iodine, or trichloroacetic acid to prevent infection and promote healing. The cornea should be stained to determine the extent of damage, an anesthetic ointment instilled and the eye padded for twenty-four hours or until healed. The patient may use antiseptic drops if desired, and atropine where indicated. Glass in the conjunctiva may sometimes be located by stroking the surface with a moist applicator before the anesthetic is used. When gunpowder is scattered in the cornea, if one waits for forty or fifty hours, using only an antiseptic, then flushes freely with hydrogen peroxide, a very satisfactory and easy removal of the particles is often effected.¹⁰

The principles of handling penetrating wounds of the sclera are the same as those of the cornea. Prolapsed uveal tissue must be excised or replaced. Prolapsed vitreous must be excised. If the ciliary body prolapses the eye is usually hopelessly lost and should be removed. Although scleral sutures are sometimes indicated, it is difficult to insert them in a soft eye with a gaping wound, and a double conjunctival flap with mattress sutures is as effective. It has been shown in humans and experimentally in animals that perforation into the posterior chamber with exposure of vitreous does not afford a ready means of entrance for

bacteria, and panophthalmitis is much less frequent than might be expected.⁵ Tetanus antitoxin should be given, followed by foreign protein in 24 hours, and an intraocular foreign body ruled out. Manipulation should be minimal. The sclera may be coagulated about the wound to aid in prevention of detached retina.¹¹ Following contusions without penetration but with an anterior chamber hemorrhage, complete bed rest is justifiable for three to five days to prevent delayed secondary intraocular hemorrhage.² A thorough examination must be made following contusions. Although usually no permanent damage results from commotio retinae, serious lesions as rupture of the choroid and luxation of the lens may follow minor blows.

The subject of penetrating wounds brings with it the problems of sympathetic ophthalmia and when to enucleate. Those men who are rather free in removing badly injured eyes have a low incidence or practical freedom from sympathetic ophthalmia. But the disease is rare, and it has been shown more than once that many eyes removed for sympathetic ophthalmia don't have it. The removal of an eye is a major economic loss, and should not be taken lightly. Following the near point of accommodation, and using the slit lamp freely we are able today to diagnose sympathetic ophthalmia early and act at once in those patients who faithfully remain under our observation. When considering enucleation it is wise to have consultation, and to follow these rules set down years ago by Maitland:⁶

1. Enucleate at once if the injured eye is hopelessly destroyed.
2. If vision in the injured eye is only light perception, enucleate at once on slightest sign of irritation in the other.
3. Enucleate at once a blind eye that suffers recurrent inflammation.
4. Do not enucleate if the injured eye still has sight and the other is normal.
5. If sympathetic ophthalmia is in progress do not enucleate if the injured eye still has vision.

In brief, there is a tendency by many today to be more conservative in the care of perforating injuries, doing everything possible to save vision while of course watch-

ing the fellow eye. Some feel that the low incidence of sympathetic ophthalmia in the war-wounded was due to the routine use of tetanus antitoxin; and Benedict feels today that intensive foreign protein therapy at the time of the injury will prevent the development of sympathetic ophthalmia.

Another problem is what to do with foreign bodies in the posterior chamber; whether or not to remove them; whether they should come out by the anterior or the posterior route. If there has been any change in standard therapy for these cases in recent years it has been toward the conservative side.⁹ There are still those who feel that if a foreign body cannot be extracted the eye should be removed. With them are those who feel that an intraocular foreign body should be removed at all costs. We all realize that an eye with an intraocular foreign body is potentially lost, that the prognosis therefore must always be guarded, that the eye retaining a foreign body often develops a chronic uveitis. The majority of men today feel that preferably a foreign body should be removed, and as promptly as possible. But with study of cases, (and records of late results are all too few), we are beginning to realize that despite a fair share of good visual results soon after extraction of a foreign body, nearly 60 per cent of these patients have lost useful vision in five years, whether the foreign body was extracted or not.³ We are learning that it is easy to do more damage to the eye in extracting a foreign body than that object might do if left in place. And despite the phenomena of siderosis and chalcosis, we are seeing many cases in which an imbedded foreign body has done no harm.

A middle of the road attitude toward this might be as follows: On the slightest suspicion, an eye should be thoroughly examined for intraocular foreign body, always including an x-ray. If an object is found it should be localized as accurately as possible. If in the anterior chamber it can usually be easily extracted. If in the lens, it should be left until development of cataract can be determined. If such develops, cataract and foreign body can be removed at the same time. If the lens remains relatively clear, nothing need be done beyond observation, for the lens tolerates foreign bodies well. If in the posterior chamber, remove by the anterior route if possible.

especially if the lens is opaque. If the lens is clear there is cause for not attempting this, unless the object is minute. If the injury is very recent, the foreign body magnetic and definitely localized, we may make a slightly curved meridional incision, or a trephine, in the sclera, insert a magnet tip, and extract the object. If there has been a lapse of a week or more, the eye is quiet, the object small and its location uncertain, one is justified and probably wise in watchful waiting. In other words, removal of a foreign body is not our goal, but preservation of vision. Just as it is often prudent to let a bullet rest in the brain, so it is sometimes wise to let a particle rest in the eye, though admittedly there might be legal complications in case of suit.

The prognosis of eye injuries depends on the amount of damage and a few other special factors. Alkali burns may do well for a few days, then the cornea slough off due to penetration and continued late action of the chemical. Most corneal abrasions and foreign body cases heal quickly without significant scarring, but now and then an infection leads to loss of useful vision. Should there be iritis or a cataract with any injury, secondary glaucoma with all its difficulties may ensue. Injuries in the region of the ciliary body, especially, and most often in young people, are prone to cause sympathetic ophthalmia. Very mild blows may be followed by cataract or hemorrhage, and, a few days later, on effort, by a second intraocular hemorrhage. A piece of wood in the orbit, and even plucking an eyebrow, has more than once led to death. An intraocular foreign body, though removed at once

with good visual result, may cause retinal detachment from scar bands years later. Yet, according to Gradle,⁴ we are not justified in positively ascribing retinal detachment to injury, in testimony, unless it follow the injury almost immediately. A mild blow may provoke interstitial keratitis. A lid wound may, by subsequent cicatricial ectropion, lead to exposure keratitis and loss of the eye. It is well to be able to reassure our patients, but, to protect ourselves, and take some credit for the good results to counterbalance blame for the many bad, we must never promise too much.

Reviewing these topics has probably benefitted me more than you. Much of it is repetition to you. Yet eye injuries are very frequent, and there is room for considerable improvement in our results. By mutual discussion and suggestion we will all do better work.

Bibliography

1. Allen, T. D.: First aid in eye injuries. *Ill. Med. Jour.*, 69:226, 1936.
2. Cordes, F. C., and Horner, W. D.: Contusion of the eyeball with delayed intraocular hemorrhage. *Am. Jour. Ophth.*, 15:942-945, (October) 1932.
3. Cridland, A. B.: Prognosis: perforating injuries of the eye. *Lancet*, 2:211-212, (July 28) 1934.
4. Gradle, H. S.: Injuries of the eye. *Jour. Iowa State Med. Soc.*, 25:573-575, (Nov.) 1935.
5. Gray, W. A.: Penetrating wounds of posterior chamber of eye. *Brit. Jour. Ophth.*, 17:15-35, (January) 1933.
6. Hansen, E. W.: Quoted by: Common eye injuries. *Minnesota Med.*, 17:336-339, (June) 1934.
7. McAndrews, L. F.: Chemical burns of the eye. *Arch. Ophth.*, 7:779-785, (May) 1932.
8. McNally, W. D.: Treatment of eye burns produced by tear gas. *Jour. A.M.A.*, 98:45-46, (Jan. 2) 1932.
9. Marshall, Don: Intraocular foreign bodies. *Am. Jour. Ophth.*, 17:416-421, (May) 1934.
10. Monahan, J. J.: Three hundred consecutive eye injuries. *Penna. Med. Jour.*, 37:219-222, (December) 1933.
11. Rhode, S. L.: Conservative treatment in perforating wounds of the eyeball. *Penna. Med. Jour.*, 37:389-392, (February) 1934. Discussion.
12. Ruedemann, A. D.: Posttraumatic eye surgery. *Surg. Clinics North America*, 15:989-994, (August) 1935.
13. Stanford, J. B.: Industrial eye injuries. *New Orleans Med. & Surg. Jour.*, 84:782-787, (April) 1932.

A FEW COMMENTS ON THE TECHNIC OF MAKING DIAGNOSTIC SKIN TESTS

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There has recently been so much comment on the subject of the inaccuracy and danger in making protein sensitization tests, that I feel that a brief statement concerning this valuable diagnostic aide may not be amiss.

It is an accepted fact that most drugs used in medical practice are poisonous if not used in the proper dosage. A child is not given the same dose as an adult. In making skin tests on a sensitive individual one is applying protein substances to the scratched skin or injecting them into the dermis. Any of these substances may be toxic to the patient and their degree of toxicity is unknown. If, however, a few simple precautions are used there is less danger in subjecting a patient to these tests than in permitting him to cross the street in broad daylight under the watchful eyes of the traffic officer. The following rules for safety may be laid down:

1. Never make an intradermal test on a patient for a substance to which he has not recently had a negative scratch test.

2. In making scratch tests, particularly on a patient with a history of asthma, or with a definite history of sensitization to one or more extrinsic substances, do not make too many tests at one time. On a child twelve to fifteen scratch tests may be ample for a first sitting.

3. In making scratch tests, if an urticarial wheal begins to develop immediately or within one or two minutes after the test substance is applied, wash it off carefully. Don't wait to see how big a wheal the patient can develop and permit him to absorb more test material than necessary. The chances are that the patient is enormously sensitive to this substance and it will be wise to use it as carefully as you would arsenic.

4. If you have not had considerable experience do not make intradermal tests. It is so easy to get false positives that this type of testing while more delicate is less accurate anyway. If you must use them don't make more than six or eight at a time.

While the above rules may seem ultra-cautious, accidents will be practically nil if

they are followed. In an experience devoted to allergy for the past eight years, I have seen only one patient who needed epinephrin to control his symptoms after scratch tests. This was the case of an adult male enormously sensitive to grass pollens. Ten pollen tests were made and were washed off in about five minutes. The constitutional reaction was readily controlled by epinephrin. When untoward results are reported from skin tests, a report should be made of the number of positive tests at the time, and the duration of time that the substance was permitted to remain in contact with the skin.

That skin tests need clinical checking is admitted. However, my experience with elimination diets has been unfortunate. The individual whose attention is focused on his diet or his child's diet often reaches the point where many unfortunate food phobias are developed. These may be more harmful than helpful.

The careless use of skin tests by untrained persons with indiscriminate substances tends to throw a valuable diagnostic aide into disrepute. At the skin section of the recent Michigan State Medical Meeting, the comments on skin testing were such that I would discard them entirely if I believed them of so little use. The truth is that properly used skin tests often furnish a short cut to therapeutic management that is of inestimable value to the patient.

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THE THERAPY OF HYPERTHYROIDISM PRECEDING AND DURING THE MENOPAUSE ERA

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The majority of women do not abruptly enter the menopause epoch. There is usually a premenopause period wherein the formerly normal menstruation begins to present numerous vagaries. The periods become irregular as to frequency, quantity and duration, and with this alteration, numerous symptoms often appear. When the menopause is definitely established, these symptoms, if untreated, tend to become intensified and continue along with the typical climacteric symptoms such as hot flashes, depression, insomnia and many others.

It is in this premenopause era, as well as in the actual climacteric that many women first show signs and symptoms of thyroid hyperactivity. This is especially true in cases of surgical menopause of young women. The author is not concerned here with those cases of true Graves disease or toxic thyroid adenoma which may occur at this time of the woman's life except to mention that these cases progress rapidly and usually require early surgery. He desires rather to emphasize that the type of thyroid overactivity to be described is neither a Graves disease or toxic thyroid adenoma, does not require surgery and that the therapeutics must be focused on the ovarian disturbance rather than the thyroid.

The common complaints of these women are as follows: Changes in menstruation, usually an irregularity with a decreased flow, uncommonly an increased bleeding; later there appear in varying order nervousness, tremor, choking sensation, occasionally dyspnea and palpitation, neck pulsations, increased perspiration; headaches usually in the occipital region; gastric symptoms and often the typical flushes of the menopause though the menstruation still is present in varying amounts. The flushes are much more severe where the menopause is definitely established but are common enough before that time. If all these symptoms first appear when the menopause has definitely occurred, they tend to be much more severe. The age of the average case with these complaints is between thirty-eight and forty-five years. If we exclude the flushes, it is readily apparent that the above symp-

toms are characteristic of those found in hyperthyroidism in any other period of life, the severity being dependent on the gravity of the thyroid dystrophy.

The physical signs found on examination usually exclude Graves disease or toxic thyroid adenoma. The basal metabolic rate is often plus fifteen per cent to plus thirty per cent and at times higher but the pulse at the time of the basal metabolic rate is usually not increased quite as much proportionately. There is seldom any exophthalmos or other eye signs, the thyroid is rarely increased in size. Neck pulsations are common but true cardiac involvement is infrequent. The pulse is often 90 or more per minute, the hands are moist and there is usually a definite tremor of the extended hands and fingers. The progressive and often severe weight loss so prevalent in thyroid toxicosis is rarely seen. On the contrary, these women are often obese. Though these patients are obviously nervous and often irritable, they do not always present the strained, tense, apprehensive appearance of true Graves disease. Clinical experience soon teaches one to recognize such cases as examples of active thyroid hyper-function rather than surgical thyroids. The author is convinced that if this condition at this particular period of the woman's life is ignored for any length of time, there is every likelihood for the development of a true thyroid toxicosis requiring surgery.

These cases are fairly common in an active Endocrine Clinic. The four cases reported here are from the Endocrine Department of the Detroit City Physicians' Office, a branch of the Welfare Department. The clientele is the usual free clinic type, welfare and unemployed people predominate,

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and there is a small number of the "white collar class" clinging desperately to the fringes of their former middle class status.

Case Reports

Case 1.— B. G., aged thirty-eight, married, Para V. Her chief complaint was the gradual decrease of her menstruation from six to two days' duration during the last eighteen months accompanied by severe occipital headaches which were especially painful shortly before menstruation. Within the last year there appeared in rapid sequence the following symptoms: nervousness, irritability, severe choking sensation, tremors, insomnia, and hot flushes, which of late had occurred several times daily. During all this time there had been a steady gain in weight. There had been many family and economic difficulties during this time to keep the patient greatly worried and disturbed. Until the present illness the menstrual, gynecological, and obstetrical history was entirely normal. Nor was there any family history of endocrine (particularly thyroid) disturbance.

The patient was of normal height and weighed 176 pounds. There was an anxious, strained look; the eyes were prominent; the thyroid was moderately enlarged, firm, freely movable, with no palpable nodules. The pulse was 90 per minute, the hands were moist and there was a coarse tremor of the extended hands and fingers. The general examination, however, was quite negative. The urine examination, blood count, and Kahn tests were all normal. The basal metabolic rate was plus twenty-three per cent with a pulse of 96.

The diagnosis was premenopause hyperthyroidism and the patient was ordered to take one tablet of desiccated whole ovary after meals. On her fourth monthly visit to the clinic she reported that in the last six weeks there had been a marked decrease in all her symptoms and that her menstruation was regular and continued for four days. On examination I noticed that she was much less nervous and that the strained, anxious look had disappeared. The pulse was still 80 per minute but there was no tremor of the hands. The medication was continued. Three months later, her symptoms had entirely disappeared and her menstruation continued for five or six days. On examination the pulse was 70 per minute, there was no tremor of the hands, and the basal metabolic rate was zero. She was advised to continue with the same medication for an additional three months.

She returned to the clinic fifteen months later with a recurrence of all her original symptoms, having been without medication for a year. One c.c. of ovarian follicular hormone in oil, injected intramuscularly every five days for two months was ordered. Three months later the symptoms were gone and the menstruation was again normal. Treatment was discontinued until symptoms recurred.

NOTE: This patient is likely to have several such episodes before the menopause is firmly established. To date, she has not returned for further treatment.

Case 2.— M. H., aged forty-two, single. Her chief complaint beginning two years ago was scanty menstruation, followed by severe nervousness, throbbing of the neck, insomnia, severe occipital headaches and hot and cold flushes. There were attacks of loss of memory, which condition became steadily worse. She was a graduate nurse but unemployed for several years. She was worried and depressed. About two years ago she noted that her periods, which always appeared every twenty-eight days and lasted about two and a half days, were now coming every nineteen to twenty-three days and were very scanty. She

was told elsewhere there was nothing wrong with her and that she should get a job, which advice did not help her symptoms or her mental depression.

Her father (a widower) was fifty years old when he married her mother who was seventeen. The patient was an only child, much pampered, yet brought up very strictly and entirely sheltered. She had a very rigid religious training. She had frequent nose and throat infections in childhood and a mild attack of gall bladder disease eight years ago. She emphasized her good health until her present illness and claimed to have been a very efficient, hard worker. The father died at sixty-one of pneumonia, and her mother died at forty-five of diabetes. There was a very close intimacy between mother and daughter. She had no living relatives and no male friends.

The patient was a short, plump woman in her forties. Her face was markedly flushed and the eyes were prominent and very bright and were either staring fixedly at the examiner or darted about restlessly. She was extremely verbose and talked vehemently. She was obviously markedly maladjusted and at times gave the impression of an incipient schizophrenia. In spite of her many troubles and complaints, she had slowly gained weight. On examination, the thyroid was not palpable, the hands were wet with a severe tremor, the pulse 140 per minute. The basal metabolic rate was plus twenty-two per cent with a pulse of 98. Urine and blood examinations and the general physical examination were all negative.

The diagnosis here was premenopause hyperthyroidism and the patient was ordered to bed for two weeks. She took ten minims of Lugol's solution once daily for ten days only and also three tablets of desiccated whole ovary daily until her next visit to the clinic. At her fourth monthly clinic visit, she stated that her headaches had disappeared, she was much less nervous and felt much better. Menstruation occurred every twenty-eight days with one day of abundant flow. On examination her weight was 133 pounds, her pulse 72 and there was no neck pulsations, tremor nor moisture of the hands. The basal metabolic rate was plus 14 per cent. She was as maladjusted as ever. She was advised to continue taking three ovarian tablets daily.

Two months later her basal metabolic rate was plus 4 per cent, pulse 72, hands dry with no tremor, weight 137 pounds. She looked and felt well.

Fourteen months after her appearance at the clinic, her menstruation again became very scanty but there was no return of her former symptoms. A course of 12 injections of one c.c. ovarian follicular hormone in oil, one every five days, was ordered for her. I believed she had entered the menopause.

NOTE: The clinical picture in this case cannot be ascribed to either a psychological maladjustment or a vasomotor disturbance. For it is significant that there has been no improvement in this woman's economic or personal affairs and she has continued to brood and worry about her circumstances more than ever. She is only slightly better adjusted. Yet her original signs and symptoms have disappeared and she is obviously in good health. On several occasions, she was so nervous and irritable that a grain of phenobarbital daily, in divided doses, was added to her other medication with excellent results. Psychiatric therapy was deliberately withheld in order to judge the efficacy of the described endocrine treatment. The clinical improvement is obvious.

Case 3.—A. T., aged forty-two, married, Para II. This woman's chief complaints were severe frontal headaches which began a year ago and occurred before and after menstruation and irregular periods. Instead of the former twenty-eight day cycle and five day flow, the periods now were entirely abnormal. She would miss an entire period and the next

one would last from one to seven days. The follow menstruation would appear in three or seven weeks with either a scanty or very severe flow. In the last six months she had various aches and pains, had become increasingly nervous and irritable, and suffered much with insomnia. She developed "a lump in the throat" and a marked tremor of hands but had continued to gain weight. She was on the welfare rolls and had many reasons for maladjustment which need not be detailed here. Her past and family history were negative.

The patient was a short, fat woman who looked decidedly older than 42 years, with a harassed, anxious appearance. There was frequent trembling of the lips, the face was flushed and she wept readily. The eyes were large, very bright and prominent, the thyroid was palpable and there were many neck pulsations. There was a marked tremor and moisture of the hands and fingers. The pulse was 90, the blood pressure 176/112, the basal metabolic rate was plus twenty-eight per cent with a pulse of 100. The urine and blood count were normal, the weight 227 pounds and the general examination was negative.

The diagnosis here was premenopause hyperthyroidism and in addition to the three tablets of desiccated whole ovary to be taken daily, $\frac{1}{4}$ grain phenobarbital three times a day was ordered. She was restricted to a 1200 calories diet.

Two months later she stated that she felt much better and stronger and was not as nervous. The two menstrual periods were regular with a little more flow. There had been no headaches in the last five weeks. On examination her weight was 200.5 pounds, the blood pressure 164/100, pulse 76. There was only a slight tremor of the fingers and she looked much better and was not as tense and lachrymose as before. She was advised to discontinue the phenobarbital but to take three ovarian tablets daily.

Eight months later she stated that she was entirely well and had none of her former symptoms. Menstruation has been quite normal in all respects for the last six months.

On examination, she appeared placid, cheerful and in obvious good health; the thyroid was barely palpable, the eyes were normal and the face was not flushed nor was there any tremor or moisture of the hands. Her pulse was 70 and her weight 188 pounds. Her last basal metabolism test was done five months ago and was plus fourteen per cent. No further metabolism studies were considered necessary at this last visit and therapy was stopped until symptoms recurred. She had lost thirty-nine pounds in weight in nine months.

Case 4.—H. Z., aged forty-three, Para II. Her chief complaint beginning a year ago was the appearance of occipital headaches that came with increasing frequency so that in two months the pain was almost constant. The pain invariably began in the occipital region and radiated towards the vertex and also the back of the neck so that actually she suffered from a generalized head pain. Within two months her periods, altho they remained regular, became very profuse, with clots. There was severe pain in both lower abdominal quadrants before and during menstruation. A few weeks later she noticed that she was becoming "shaky," would cry readily and was very nervous. Soon there appeared frequent choking sensations and insomnia. All these symptoms became steadily worse but she continued to gain a little weight throughout the last year.

She had the usual childhood diseases and anemia (chlorosis?) as a young girl. There was severe dysmenorrhea until the birth of her first child. With both children, she had very long, difficult labours. She has had a trachelorrhaphy and hemorrhoidectomy. The family history is unimportant.

The patient was a short, slim, bespectacled woman

with an anxious look. The thyroid was palpable and there were many neck pulsations. There was a severe tremor of the wet hands. The general examination was negative. The pulse was 96, the blood pressure 140/84, blood count and urine examination were normal. The basal metabolic rate was plus seventeen per cent with a pulse of 88. The gynecological examination was negative.

The diagnosis here was premenopause hyperthyroidism. The patient was advised to take ten minims of Lugol's solution once daily and one-half grain of phenobarbital after meals, for eight days. Then both of these prescriptions were discontinued and she took one tablet of desiccated whole ovary after meals.

Three months later she reported that she felt very well, had no headaches and that her last two periods were normal. Her only complaint was the recent development of constipation. On examination, there were no neck pulsations, the hands were dry and without any tremor, the pulse was 68 and the anxious appearance was no longer present. She was advised to continue taking the ovarian tablets for another month.

This woman appeared at the clinic fifteen months after her last visit at our request. She stated that she had remained well without any recurrence of her former symptoms.

Comment

There is a striking similarity in both the signs and symptoms in each of these cases. All have definitely improved under similar therapy and the physical signs of thyroid overactivity have decreased proportionately. These cases well illustrate some of the fundamental concepts of endocrinology. There is an intimate relationship between all the internal glands but this relationship is particularly close between certain glands as for example the very close associations between the ovaries and the pituitary and also between the thyroid and the ovaries. A prolonged disturbance in one gland appears to force the related gland into an unusual behavior in an effort to maintain the former normal related activity of these two glands. Though the original disturbance is uniglandular, one eventually finds a pluriglandular dystrophy in many endocrine cases. It becomes important, therefore, to evaluate properly each glandular dystrophy and to determine whenever possible which is the primary offender in order to institute proper therapy. This is often very difficult because similar symptoms may be produced by different gland dystrophies, such as the excessive menstrual bleeding produced by either pituitary or thyroid disturbance.

In the cases reported, the signs and symptoms are typical of simple hyperthyroidism but they are nevertheless the results of a primary ovarian disturbance. In each the abnormal menstrual history preceded the

thyroid symptoms by an appreciable time interval and each was relieved by ovarian therapy. Nor can these cases be considered as recurring hyperthyroidism because there is no history in any of them of a previous similar occurrence. Eventually the thyroid symptoms predominated in the clinical picture but this is a frequent occurrence in polyglandular disturbances. Very often the gland secondarily involved produces a situation much more severe than the original difficulty. Although a basal metabolism estimation is only one piece of evidence, one cannot ignore repeated tests that are compatible with the other clinical findings in a case throughout its observation. To label these cases as examples of vasomotor disturbance does not solve the problem. What are the causes of this vasomotor disturbance? If one considers the patient's age and primary menstrual symptoms, he is forced to regard the ovarian dystrophy as the original cause of the syndrome.

Since glandular disturbances are usually functional in character, the therapy is of a substitution nature, that is, either the hormone or dessicated product of the affected gland is employed. In those cases where the thyroid overactivity produced excessive symptoms, patients were given very small doses of iodine, usually ten minims of Lugol's solution daily and small quantities of phenobarbital for ten days. All cases were treated with dessicated whole ovary given by mouth, though many eminent clinicians claim that oral therapy is entirely useless.

This entire problem will receive a more thorough discussion in a subsequent article on menopause therapy. For the present, it may be stated that in a clinical experience of hundreds of cases, very excellent results, as a whole, were obtained with oral administration of ovarian medication. In the very severe cases where the follicular hormone was given hypodermatically, it was found that fewer and less frequent injections were needed where oral ovarian therapy was also employed. One five grain tablet, which is equivalent to thirty-five grains of the fresh ovarian gland, was taken three times daily. The author does not pretend to explain the efficacy of this type of therapy but he cannot ignore results that are eminently satisfactory to the patients.

It is true that many of these patients had sufficient practical reasons for severe

psychological maladjustments. Each of the reported cases is typical. But it is certain that their maladjustments were not responsible for their signs and symptoms. For today they still have as many problems as before, they are still maladjusted but their original complaints with the accompanying signs and symptoms have disappeared. The only psychotherapy employed was the assurance to those patients who feared surgery that such a procedure would not be necessary.

These women will inevitably enter the menopause but experience has shown that the use of ovarian therapy when indicated in the premenopause period usually allows them to pass more gently into the climacteric without a recurrence of the thyroid symptoms and very often they have a milder, comparatively short period of the typical menopause complaints.

Many were definitely obese. The raised basal metabolic rates were disregarded and their diets were limited to 1200 calories. They invariably lost much weight, to their great satisfaction, and did not develop any additional symptoms.

The headache in the occipital region is one of the commonest symptoms of deficient ovarian activity and responds readily to ovarian medication.

Conclusions

1. Certain women in the few years before the menopause or at that time present signs and symptoms characteristic of thyroid hyperactivity.
2. Careful study demonstrates that this condition is secondary to an ovarian dystrophy.
3. The therapy must be centered on the ovarian disturbance. The oral use of dessicated whole ovary has given good therapeutic results.
4. In a reasonable length of time, the signs and symptoms disappear and eventually the climacteric is established, usually in a milder and shorter form.
5. These patients when obese can safely use a 1200 calories diet regardless of the raised basal metabolic rate. The benefits of a limited diet and a reasonable weight loss are probably additional factors that enhance their clinical improvement.

REPORT OF SKIN ABRASION INFECTED BY GONOCOCCUS

E. VAN CAMP, M.D.
BATTLE CREEK, MICHIGAN

The patient, J. E., ten years of age, was seen October 19, 1936, with a skin lesion two inches below the right knee. He gave a history of a slight skin abrasion about ten days previous to examination. The skin lesion did not bleed but exuded serum. Six days later it exuded yellow pus and a painful swelling developed in the right groin. When first seen the patient seemed only slightly ill, but he had a temperature of 102 degrees, and had a marked tenderness at the site of the lesion and inguinal gland.

He was not seen again until November 12. On account of gland involvement, a smear was taken to the City Health Laboratory, with the name and age of the patient, and site of lesion.

The report was gram negative intracellular diplococci. Other cultures were taken, one on Loeffler's media, which of course gave no growth of diplococci, but ruled out the micrococcus catarrhalis. On November 12 the lesion was 1.5 cm. in diameter with a raised rounded edge. It was completely covered with a yellow cheesy material 0.5 cm. thick. This was not adherent and when removed left a red surface with only pin point hemorrhages. The inguinal gland was about 3 cm. in diameter.

The skin healed with antiseptic treatment, with even more rapid recession of the gland inflammation. Two weeks' treatment seemed to effect a cure.

The patient's family is much above the average in intelligence, morals and cleanliness. The school he attends is our model school. No clue has been found to trace the source of infection.

THE DEPARTMENT OF POSTGRADUATE MEDICINE

of the

UNIVERSITY OF MICHIGAN,

WAYNE UNIVERSITY COLLEGE OF MEDICINE

and

THE MICHIGAN STATE MEDICAL SOCIETY

Progressive Five-Year Program of Postgraduate Study
1937 Schedule

Short, Intensive Courses to be given in the spring of 1937

Ann Arbor Center

- | | |
|--|---------------------------|
| 1. Electrocardiographic Diagnosis | April 5-10, inclusive |
| 2. Diseases of Metabolism | April 12-16, inclusive |
| 3. Ophthalmology and Otolaryngology | April 26-May 1, inclusive |
| 4. Diseases of the Blood and Blood-forming Organs
(One day each week for eight weeks) | April 8-May 27 |
| 5. Surgery (One day each week for eight weeks) | April 1-May 20 |

Detroit Center

- | | |
|---|-------------------------|
| 6. Pediatrics | April 19, 20 and 21 |
| 7. Proctology | April 26, 27, and 28 |
| 8. Diseases of Genito-Urinary Tract | April 29, 30, and May 1 |
| 9. Gynecology, Obstetrics and Gynecological Pathology | May 3 to 8, inclusive |
| 10. Practitioners' Course | May 10 to 15, inclusive |

The annual fall extra-mural courses will begin in September. The program will be announced later for the following centers:

Bay City
Battle Creek-Kalamazoo, jointly
Flint
Grand Rapids

Lansing-Jackson, jointly
Traverse City-Manistee-Cadillac-Petoskey,
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FEBRUARY, 1937

*"Every man owes some of his time to the up-
 building of the profession to which he belongs."*

—THEODORE ROOSEVELT.

EDITORIAL

THE NATIONAL PROGRAM FOR CONTROL OF VENEREAL DISEASES

THE proceedings of the recent three-day conference on the control of venereal diseases held at the call of Surgeon General Thomas Parran of the United States Public Health service, have been well summarized in an editorial in the *Journal of the American Medical Association* of January 9, 1937.

It is of utmost importance that we realize that such a program for the control of venereal diseases is upon us and that we place ourselves in a position to guide its medical application in Michigan. No one can appreciate the need for such a program better than the medical profession or more fully realize the value of dispelling the spirit of taboo that has surrounded the frank discussion of venereal diseases. We are sure

the medical profession is willing and anxious to coöperate and play their necessary role in this campaign. We would like to feel that we have, however, a guiding hand in this matter, and it is urgently necessary that immediate steps be taken to organize a plan suitable to both the United States Public Health Service and to our State Health Commissioner in which the practicing physician will be an important factor.

In the conference referred to, the section on public health control stressed the necessity of carrying treatment facilities to all persons of all economic strata and although it was declared that whenever and wherever possible patients should be treated by family physicians in the usual manner and that the personal relationship of patient to physician should be maintained wherever possible, the section reported that in its judgment the treatment of indigent and border line patients in clinics would be necessary. It is hoped that in as far as possible family physicians in Michigan may be given an opportunity of caring for such indigent and border line cases rather than commit themselves further to the clinic policy. The State Medical society is trying to work out such a plan with the speed urgent to the occasion.

The high lights of this control program will revolve about three main divisions: (1) educating the public; (2) finding infectious cases; (3) proper treatment of syphilitic patients.

The public educational program will not be a direct problem of the medical profession. Syndicated newspaper articles and editorials are already being liberated. Other articles are to be expected in the popular monthly periodicals. Frank discussions of treatment standards are to be expected in such articles. The public is to be instructed not alone as to the incidence and nature of syphilis but as to drugs used and the minimum amounts of treatment necessary to secure the maximum in permanent

arrest or "cure." It is therefore necessary that we be well acquainted with such standards. The special Article by Dr. H. N. Cole on "The use of Antisymphilitic Remedies" in the *Journal of the American Medical Association* of December 26, 1936, is highly recommended as a brief outline of these standards.

Let us be alive to the importance of being prepared. Your County Medical Society, as well as this JOURNAL will keep you in touch with developments.

PREVENTION OF AUTOMOBILE ACCIDENTS

THIS is in a double sense a medical subject. The physician is called in to make the necessary repairs to the human machine; and, on the other hand, if the number of accidents is to be diminished, the medical profession must help make the selection of candidates given drivers' licenses.

In industry, preference is given to the young adult whose reaction-time is quicker than that of a man past fifty years of age. This need not apply to the driver of an automobile. The caution of the older driver more than compensates for his slower reaction-time. Other things being equal, it is a question if the nervous driver is not the greater menace to road safety. He gets up late in the morning and starts out late for his destination, hoping to make up for lost time on the road. He rushes along at a rapid rate of speed and takes no precaution for a possible emergency, in the event of which catastrophe is sure to result.

Then there is the driver who does not know when he has had sufficient cocktails or highballs.

"When night
Darkens the streets, then wander forth the sons
Of Belial flown with insolence and wine."

Of course, it scarcely needs repeating that once the mentality is dimmed, the reaction time is entirely destroyed and anything may, and it usually does, happen. The drunk driver, however, is the problem, not for the medical profession, but for the courts.

The physician who would forego some form of medical protective insurance would be foolhardy indeed. What can be said of the driver who is unprotected by insurance for personal liability or property damage, and yet how many take a chance! If the risk of being uninsured was exclusive to the careless driver, little could be said, but how many drivers are there who are financially unable to take care of damage, either personal or property, resulting from their carelessness? No one should be allowed to drive an automobile on public highways whose machine is not insured to take care of any damage that might result from carelessness, either on the part of the driver, or the person injured. The pedestrian cannot be always exonerated.

Then again, the greatest single factor in the promotion of safety on streets and highways is courtesy or good manners. If drivers and pedestrians were as courteous on the streets as, let us hope, they are in their own homes, there would be very few casualties in comparison to the number of past few weeks. It seems that the automobile has brought to the surface all the bad manners of which some persons are capable. Consideration for the other fellow and strict attention to traffic signals, safety zones and other street signs, on the part of both pedestrian and driver, will accomplish more than any expensive program of survey and street-widening that can be devised. Let's use common sense!

READ YOUR JOURNALS

ONCE a year, the editor is called upon to make a report of his editorial duties to the council of the society. It is always a somewhat difficult matter to produce anything in the way of a report, that should not be already familiar to the readers of the JOURNAL. In a sense, the contents of each number of the JOURNAL is a report. However, this gives an opportunity, at least, to surmise as to what extent the JOURNAL is read. This implied doubt on our part, that the JOURNAL may not be read by everyone, is occasioned by questions put to the editor, the answers to which would be perfectly obvious to anyone who read over the JOURNAL each month.

A great deal of effort as well as expense

goes into each month's JOURNAL. The JOURNAL is an integrating factor in Michigan medicine. Without it, no county medical society could possibly know what another county society is doing, nor could the counties know what the elected and appointed officers of the state medical society are doing. There never was a time in the history of medicine when organization meant more to each individual doctor, but organization will mean very little unless each member of the society is alive to the purposes of organized medicine. The present year is, if anything, more important than any in the immediate past. It is a legislative year, and much legislation of importance to the medical profession as well as the people at large on health matters is likely to come up. The JOURNAL endeavors to keep in touch with medical legislation as it comes up in the legislature, as well as to report the essential transactions of the council, executive and standing committees.

The influence of the JOURNAL might be broadened were the members to have it sent to their homes. This would make it available to the doctor's wife who is doubtless a member of the Woman's Auxiliary. The Woman's Auxiliary has assumed nationwide proportions. It, in a sense, parallels organized medicine. The members of the Woman's Auxiliary should also have access to the JOURNAL.

WHO HAS THE LAST WORD?

CERTAIN cases which lack in clearness of diagnosis are referred by the clinician to the roentgenologist. The roentgenologist is presumed to be able to make a biopsy without undue discomfort to the patient. If his examination is carefully made, in certain selected cases, it is difficult to controvert his findings. However, when the case goes on to the general surgeon, or to the special surgeon, each feels that he has the final say, so far as the clinician and roentgenologist are concerned. However, the surgeon himself is not final since the accuracy of his findings depend upon his knowledge of gross pathology. The specimen is finally turned over to the pathologist.

In the course of human events, however, all things may be questioned, even the findings of the pathologist. Dr. Lewis Greg-

ory Cole, of New York, who is a pioneer roentgenologist of note, is not willing to concede infallibility even to the pathologist. In an article, double column, twenty-seven pages in length, in the December number of *Surgery, Gynecology and Obstetrics*, he scores what he calls the pathological yardstick. It happens that Dr. Cole sent eight microscopic sections of organic gastric lesions, chosen from surgery and autopsy specimens, to twenty-two well-known pathologists, who willingly complied with his desire to check on their findings. Each pathologist was asked to examine identical sections, to answer three questions and to permit their answers to be published. Dr. Cole's questions were as follows: (1) Is the lesion malignant? Yes or No? (2) What is the type of lesion? Carcinoma, sarcoma, etc.? (3) On what criteria did you base your opinion? The suggested criteria are (a) arrangement of cells, (b) size and shape of cells, (c) nuclear changes, (d) changes in chromosomes, (e) manner in which cells take stain, and (f) invasion of adjacent structure, or other.

The article is a detailed study which doubtless many of our surgical readers have already perused. Dr. Cole's summary and conclusions are as follows:

A. In about one-quarter of the cases of gastric lesions, there was a difference of opinion among representative pathologists as to whether the lesion was malignant, and a still greater diversity of opinion as to whether the lesion was a carcinoma, a sarcoma, or some other neoplasm.

B. Opinions vary even more when they are based on a study of microscopic sections that are cut and stained in a routine manner, especially when only a single stain is used.

C. Ewing believes that the difference of opinion occurs in about 20 per cent of the cases.

D. Routine microscopic sections as cut and stained in more than 90 per cent of the institutions are inadequate to rule out the presence of a gastric cancer or neoplasm; a positive diagnosis of cancer may be made on such sections, but not a negative diagnosis.

E. The pathologists mentioned rate above the average and, if there is as much diversity of opinion among them as herein shown, there would be an even greater difference of opinion among those less experienced.

F. This difference of opinion as to the pathology present in gastric lesions astonishes the internist and the surgeon and some pathologists, but why should it?

G. A similar difference of opinion as to pathology in bone tumors has been known to exist since Codman started the bone sarcoma registry.

H. Ewing now maintains that the pathologist en-

counters the same difficulty in the diagnosis of gastric lesions that he is known to have encountered in the diagnosis of bone lesions.

This study should have the effect of making all diagnosticians, whether clinicians, roentgenologists, surgeons or pathologists, more charitable to one another.

NEW DEVELOPMENTS IN THE FIELD OF COMMON INDUSTRIAL POISONS*

By ALICE HAMILTON, M.D., Sc.D.
U. S. Department of Labor, Division of Labor Standards

Washington

This paper discussed some of the most recent findings in the field of industrial toxicology, especially with regard to some of the more familiar poisons. That lead plays a causative rôle in hyper-tonia, in gastric and duodenal ulcer, in diseases of unknown etiology, such as multiple sclerosis, cirrhosis of the liver, exophthalmic goitre, spontaneous gangrene of the feet, is maintained in the recent literature. Benzol poisoning is found to be characterized not always by aplasia of the bone marrow with leukemia. The early detection of benzol poisoning has been much facilitated by Yant's new test. The homologues of benzol, toluol and xylol, appear to have a less negative character than has been assumed.

The recent literature contains several reports of severe and sometimes fatal poisoning from carbon tetrachloride, with lesions that are sometimes almost exclusively in the liver, or again in the kidneys. Several atypical cases are described. Trichlozethylene is another member of this group which, in several European countries, has given rise to serious trouble.

Hydrogen fluoride is an industrial agent of increasing importance and new light has been thrown on the effect of the animal body of long-continued exposure to air containing apparently safe dilutions. Mercurialism is the subject of study on a large scale in Russia, where new theories have been advanced with regard to its real nature. Finally, the new findings connected with possible dangers in electric welding are discussed.

*Address delivered before the Wayne County Medical Society, Detroit, Monday Evening, January 11, 1937.

MEDICO - LEGAL DEPARTMENT

THE DOCTOR ON THE WITNESS STAND

By E. A. WITTEW, M.D., LL.B.

The doctor who is summoned as a witness should keep in mind a few simple rules, so that he may appear to his best advantage while on the witness stand:

1. Make an arrangement with your client for a proper fee for an investigation of the case and for your opinion of the facts he may set before you, and refuse if you are not wholly satisfied as to the merits of the case.
2. Make yourself thoroughly familiar with all the facts upon which you are to testify.
3. After you are satisfied with the facts bearing upon the case, refresh your memory by the opinion held by standard writers in relation to the subject.
4. Interchange views with experts on the other side.
5. Refuse to give expert testimony if you have the least doubt as to the correctness of your opinion founded upon the facts advanced.
6. Let your bearing be dignified and grave.
7. Use plain and simple language.
8. Be explicit and definite as to your facts.
9. Your testimony is taken down on paper, recorded and printed, and you may be called upon again in a reinvestigation at a subsequent trial so it is essential that you should understand clearly each question put to you.
10. Answer clearly each question, volunteer nothing. You may appeal to the court if "yes" or "no" give only part of the truth, and he will sustain you.
11. Do not be irritated by the cross-examiner.
12. Be careful, honest, and take no offense. It is the wisest witness that knows when to say "I do not know."

If asked if the work of a certain writer is an authority and you assent to it, quotations may be cited in opposition to the facts you may have given. In science, facts themselves are the only authority and a book simply represents an attempt to present these facts. The law allows you to refresh your memory by reference to your original notes, but you may not read them to the court.—*Bay City Medical Bulletin.*

MEDICAL PHASES OF WELFARE AND RELIEF LEGISLATION

Following are the five points proposed by the Committee on Medical Economics of the Michigan State Medical Society for inclusion in the ten bills being drafted by the Michigan Welfare and Relief Study Commission:

1. The conservation and maintenance of the public health is a necessary function of our government.
2. Medical care shall include: Home, Office, Hospital Care, Bedside Nursing Care, and Dental Care for those families that are receiving relief and those families whose income is on a mere subsistence level.
3. The State Welfare Administration, responsible for the administration of Welfare funds to lo-

cal relief administrations, shall establish a Division or Department charged with the responsibility of supervising all medical activities herein mentioned and supervised by a registered and licensed Doctor of Medicine.

4. Each County or District shall have an advisory committee, composed of members of the various professional groups to advise on all disputes, determination of policies, procedures, etc.
5. Hospitalization of the afflicted adult and afflicted child shall be administered through the local welfare unit in each County or District in the same manner as any other form of relief. Uniformity, record forms, and auditing of bills shall prevail throughout the State.



The following is the third of a series of brief articles on the business side of a physician's practice. They offer pithy suggestions and aids to enable the doctor to master, with more ease, a phase of his daily work which is often distasteful but always necessary.

THE PATIENT'S ACCOUNT

ALLISON E. SKAGGS and HENRY C. BLACK

THE primary purpose of the patient's account is to record the amounts charged and paid, and the balance due. Other important information includes dates of statements sent, arrangements for settlement, who is responsible for the account and where he is employed. It may seem unnecessary to devote space here to the discussion of such a simple procedure, but investigation shows that the majority of doctors waste either time through cumbersome methods or money through inadequate information.

In order to make this information readily available it should be possible to transfer paid-up accounts to another ledger as soon as paid. This cuts down the time required for looking up balances, posting and sending statements. These paid-up accounts should be so filed that they are easily accessible for reference or for transferring back to the current ledger when the patient has more service.

Regardless of the type of card or sheet used, the accounts should be filed alphabetically with enough indices so that there are not more than fifteen or twenty accounts to a section. This facilitates matters greatly both for the doctor and the office girl, yet a well indexed ledger in a doctor's office is rare.

Patients' accounts are potential "money in the bank" and deserve the same careful recording that your drug house makes of your bill with them. Charges, if not recorded daily are apt to be forgotten entirely. The efficiency of the patient's account itself directly affects the percentage of collections because:

First, since the doctor's office is primarily to care for the sick, clerical work must be handled with dispatch or it is neglected.

Second, complete information as outlined in the first paragraph provides the best basis for extending credit on subsequent services.

Third, the promptness with which transactions are recorded is reflected in the promptness with which patients pay their bills. Balances become readily available, statements more regular, and other collection procedures are less frequently required.

MISLEADING PROPAGANDA

Recently an incorrect statement appeared in a reputable national weekly relative to the stand of the Michigan State Medical Society on health insurance. The impression left was that the State Society was in opposition to the American Medical Association.

The Michigan State Medical Society is not now and never has been in favor of socialized medicine or compulsory sickness insurance. In 1934, its Committee on Medical Economics presented a mutual health service plan to the House of Delegates of the State Society as a committee report, upon which no action has been taken.

Since 1931, the Michigan State Medical Society has sponsored studies costing \$20,168.96 designed to perfect both the distribution of medical care and its high quality. From its comprehensive surveys, it can find no existing evidence of comparable data to show that a socialized medicine system would work in Michigan, but it has discovered such a program would be deficient in quality, as demonstrated abroad where socialized medicine is known as "second class" service. The physician has an obligation to maintain the *quality* of medical care.

The magazine in question was informed of these facts and immediately agreed to correct the erroneous impression given by its article.

President's Page

"To Protect the Welfare and Health of the People"

THE Proposed Basic Science Bill is recommended to the Michigan Legislature with the above intent and purpose in its first Section.

Section 2 provides for the appointment of a board of examiners in the basic sciences—six laymen, full-time professors *who are not engaged in the practice of healing*. Sections 3 and 4 pertain to the organization of the Board.

Section 5 provides for examinations in basic sciences as a prerequisite to eligibility to practice the art of healing in Michigan.

Section 6 provides that no examining board for any system of healing shall examine an applicant unless he first presents a certificate of eligibility in the basic sciences.

Sections 7, 8 and 9 refer to the powers and duties of the Board, relative to administering oaths, revoking certificates of eligibility obtained through fraud, et cetera, and the punishment of offenders against this act.

Section 10 lists the basic sciences as anatomy, physiology, pathology, bacteriology, public health and hygiene, and chemistry. It defines terms, and gives the exemptions to the act.

Section 11 covers the financing of the Board.

Section 12 states: *"This act shall not apply to any legally registered and licensed person engaged in the practice of healing on the effective date of this act."*

Section 13 explains that the certificate of eligibility in the Basic Sciences is an additional qualification, and not a substitute for the legal requirements set for the examination in any of the branches of the healing art.

Section 14 provides that *"the board of examiners in the basic science shall, in no manner, discriminate against any system or branch of healing. No applicant shall be required to disclose the professional school he may have attended or what system of healing art he intends to pursue. The examination papers shall not disclose the name of any applicant, but shall be identified by numbers."*

Sections 15 and 16 are the usual saving clause, and the repeal of all acts inconsistent with the provisions of this act.

Those now in practice are not affected by the proposed basic science bill (Section 12), which does not, in any manner, discriminate against any system or branch of healing (Section 14). This proposal is fair and impartial, a public health measure to raise the standards of all who treat the sick, insuring uniform health safeguards to all the families of Michigan.

What are *you* doing to help pass this bill designed "to protect the welfare and health of the people of this State"?



President of the Michigan
State Medical Society

DEPARTMENT OF SOCIETY ACTIVITY

L. FERNALD FOSTER, M.D., Secretary

Council Chairman's

- - - Communication

TO THE DEFENSE OF RIGHT AND GOOD

Minute Men of Medicine:

THE Legislature is now in session in Lansing. Over one thousand bills will be introduced during February, March, April and May. You will have a three-fold interest in many of these matters:

- (a) As a citizen.
- (b) As a physician.
- (c) As a protector of Public Health (Hippocratic Oath).

The proposals of major importance to you will be:

1. The Basic Science Bill.
2. Relief and Welfare Bills.
3. Occupational Disease Bill.
4. Group Hospitalization (Hospital Insurance) Bill.
5. Bills against health safeguards.

The Michigan State Medical Society will keep you well informed of legislative activities. (You, in turn, will help materially by transmitting pertinent information to the Executive Office.) When emergencies arise, you will be called upon for necessary action. We ask that you respond immediately, that you live up to your duty as a Minute Man, and that you rush to the defense of what is right and good.

P. R. URMSTON, M.D.,
Chairman, The Council, M.S.M.S.

"UNEMPLOYMENT COMPENSATION"

UNDER the Federal Unemployment Compensation Act, unless a physician has eight or more employees he is exempt from same and is not subject to the payroll tax imposed by Title No. 9 of the Act.

Under the Michigan Unemployment In-

surance Act, placed on the statute books December 23, 1936, an employer is allowed an exemption of \$6,000 of payroll per annum. The Michigan law, which governs exclusively in Michigan, provides for only an employer tax, not an employee tax. The rate of 1936 payrolls is 0.9 per cent, payable on or before January 31, 1937. The rate on 1937 payrolls will be 2 per cent payable on or before January 31, 1938. The Michigan tax is payable to the Unemployment Compensation Commission of Michigan in Lansing, which forwards same to the Federal government. The Federal tax is payable to the Collector of Internal Revenue (same as Income taxes), and the amount paid to Michigan is offset against the Federal tax, up to 90 per cent of the Federal tax.

It is believed that the great majority of physicians will not be affected by the Unemployment Compensation phase of the Social Security Act, due to the exemption of \$6,000 payroll per annum, and also because few physicians have eight or more on their staff.

The Social Security Board has published three Information Service circulars which provide information about the features of the Act. Write Robert Huse, Business Information Division, Social Security Board, Washington, D. C., for copies.

THE PHYSICIAN— A PUBLIC SPEAKER

LIKE many other of our traditions it has seemed that a physician could not present any subject, other than one on scientific medicine, to a lay audience. In recent years so many vital economic problems have arisen in the practice of medicine that many of our colleagues have been forced to either discuss or debate them before lay groups. Much to their surprise they have discovered that they have not only made fine presentations of their subjects but that they have derived a refreshing satisfaction from the experience.

The physician never before has had so many important subjects to discuss with lay groups as he has today and there has never been such a need for discussion of these subjects as now exists.

We, in Michigan, could well afford to make appearances on such subjects as the Basic Science Bill and the Socialization of Medicine. They are subjects which every physician should thoroughly understand and be capable of discussing. Your State Society has furnished much data on these subjects and more is available at any time. No one is as fitted to discuss these subjects as intelligently as the physician and if the public is to be adequately informed it is the obligation of the medical profession to furnish this information.

The time has come when every physician must ascend the rostrum or appear before the microphone and without prejudice or bias, publicize the subjects which affect not only his profession but which are so vital to the public health.

The public is entitled to honest information on the many problems of organized medicine. They have looked to the medical profession, but too often have had to receive their information from sources not qualified to provide it.

Have You Assumed Your Obligation?

IMPORTANT COMMITTEE REPORTS

"To the end that a united stand be taken at all times by these three groups in matters of mutual interest," a special Joint Committee of five, two from the Michigan State Medical Society, two from the Michigan Hospital Association, and one from the Michigan Association of Roentgenologists has been appointed to present the medical and hospital viewpoint toward and the solution of the Crippled Child, the Afflicted Child and the Afflicted Adult problems to the appropriate state or county governmental agencies.

Read the minutes of the Joint Meeting of the Committee Studying Fee Schedules A, B, C, and D, with the Liaison Committee with the Hospital Association and with representatives of the Michigan Hospital Association, held January 8, 1937. (The minutes are published on page 120.)

The minutes of other important committee meetings are also published in this is-

sue—see the report of activities of the Advisory Committee on Syphilis Control Program, the far-reaching action of the Committee on Medical Economics at its meeting of December 9, the important study of the Committee on Maternal Health, and the programs of the Legislative Committee and the Advisory Committee on Postgraduate Education.

Your State Society is active—very active—in your interests, and the interests of better public health and medicine in Michigan.

THE SPREAD OF BASIC SCIENCE

The introduction of Basic Science legislation during the current year has been under consideration by the State Medical Associations of California, Colorado, Florida, Georgia, Kansas, Montana, Michigan, No. Dakota, Oklahoma, Vermont and Wyoming. This, in addition to the states already having Basic Science Laws, represents a good percentage of the United States, and is further argument for the passage of such a law by the Michigan Legislature—before this state becomes the dumping ground for uneducated and incompetent healers.

HILLSDALE COUNTY IN SECOND COUNCILOR DISTRICT

The Council of the Michigan State Medical Society, at its Midwinter Meeting of January 20-21, 1937, took action by unanimous vote to transfer the Hillsdale County Medical Society from the Third to the Second Councilor District, in accordance with the request of the Hillsdale County Medical Society. This action was taken under authority of Article 5, Section 1 of the Constitution of the Michigan State Medical Society.

COUNCIL AND COMMITTEE MEETINGS

1. *January 8, 1937*—Committee on Fee Schedules A, B, C, D, and Liaison Committee with Michigan Hospital Association—Wayne County Medical Society Building, Detroit—6:30 p. m.
2. *January 19, 1937*—Legislative Committee—Hayes Hotel, Jackson—4:30 p. m.
3. *January 20-21, 1937*—The Council of the Michigan State Medical Society—Hotel Statler, Detroit.
4. *January 24, 1937*—Maternal Health Committee—Hotel Statler, Detroit—11:00 a. m.

ANNUAL REPORT OF CERTIFIED
PUBLIC ACCOUNTANTS FOR 1936

WE HAVE made an examination of the balance sheet of MICHIGAN STATE MEDICAL SOCIETY as at December 26, 1936, and of the statement of income for the fiscal year ended at that date. In connection therewith, we examined or tested accounting records of the Society and other supporting evidence, and obtained information from its Executive Secretary and other employees. We also made a general review of the accounting methods and of the operating and income accounts for the year, but we did not make a detailed audit of the transactions.

In addition to our examination of the balance sheet and statement of income, we made certain test checks of the recorded cash transactions and other data supporting the accounts and records, as herein-after outlined. We also reviewed the cash receipts and disbursements in the funds administered by the Society.

The Society was organized as a corporation not for pecuniary profit on September 17, 1910, under the laws of the State of Michigan. It is affiliated with the American Medical Association and charters county medical societies within the State of Michigan. The purpose of the Society is the federation and protection of the medical profession and the extension of medical knowledge. In the furtherance of these purposes the Society publishes THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

Financial Analysis

The balance sheet included herein, in our opinion, fairly presents the position of the Society as of December 26, 1936, on the basis outlined in this report. The following summary shows a comparison of the assets and liabilities at the beginning and end of the year:

	Assets Dec. 26, 1936	Dec. 28, 1935	Increase Decrease
Cash	\$ 6,840.66	\$ 6,943.90	\$ 103.24
Notes and accounts receivable	875.89	563.20	312.69
Inventory	918.00	1,558.29	640.29
Securities—at cost, less allowance	31,701.00	24,909.00	6,792.00
	<u>\$40,335.55</u>	<u>\$33,974.39</u>	<u>\$6,361.16</u>
Liabilities			
Accounts payable	\$ 2,750.41	\$ 685.73	\$ 2,064.68
Liability for fund administered	1,031.38	1,038.31	6.93
Unearned income	830.00	1,270.00	440.00
Reserve for Medico-Legal Defense Fund	15,984.84	15,413.24	571.60
Net worth	<u>19,738.92</u>	<u>15,567.11</u>	<u>4,171.81</u>
	<u>\$40,335.55</u>	<u>\$33,974.39</u>	<u>\$6,361.16</u>

Of the increase in the net worth in the amount of \$4,171.81, \$1,197.50 is due to a reduction in the allowance necessary to reduce the value of securities held in the general fund of the Society to quoted market values.

Notes receivable for dues represent the uncollected portions of notes taken in settlement of 1931, 1932, and 1933 dues. No collections on these notes were received during the year ended December 26, 1936.

Accounts receivable from advertisers and exhibitors were analyzed as to date of charge and are classified in comparison with the balances at December 28, 1935, as follows:

	Dec. 26, 1936 Amount	Per Cent	Dec. 28, 1935 Amount	Per Cent
October, November, and December	\$ 772.26	58.44	\$568.92	60.04
July, August, and September	198.75	15.04	28.50	3.01
January to June, inclusive	13.00	.98	72.91	7.70
Prior to January 1	337.58	25.54	277.17	29.25
TOTAL	\$1,321.59	100.00	\$947.50	100.00

The balances due from county societies represent dues collected for the Society by two county societies and impounded in depository banks. As funds are released by the banks, the Society's share will be forwarded by the county societies. No payments on these accounts were received during the year.

Accounts receivable for medical histories sold by the Society in prior years in the amount of \$86.40 were written off as uncollectible.

Based upon our analysis of the notes and accounts and conference with the Executive Secretary as to their collectibility, it is our opinion that the allowance of \$625.00 is sufficient to care for losses anticipated at the date of this report.

The inventory represents 306 sets of the "Medical History of Michigan," a two-volume work published by the Society several years ago. The inventory value has been reduced to \$3.00 per set by a charge against income in the amount of \$589.66.

An exhibit of securities owned is included in a later section of this report, which exhibit sets forth the par value, cost and quoted market values at December 26, 1936. Unlisted securities have been valued from information furnished by brokers as to the current bid and sales prices. During the year, \$3,000.00 par value of bonds of the Pennsylvania Railroad Company, carried in the general fund, were called at a price slightly in excess of their cost to the Society. Of the proceeds, \$2,015.00 was invested in \$2,000.00 par value of bonds of the Central Illinois Public Service Company. In order that the securities in the Medico-Legal Defense Fund might approximate the Medico-Legal Defense Fund reserve, \$4,813.75 of the Society's monies was invested in securities for the benefit of the Medico-Legal Defense Fund. Matured coupons on bonds not in default which were not cashed at December 26, 1936, have been included at par value, but no other accrued interest is included in the balance sheet.

As far as we could ascertain, provision has been made for all liabilities at December 26, 1936.

We have included herein a statement in summarized form of the receipts and disbursements of the fund administered for the Joint Committee on Public Health Education.

Collections of 1937 dues have been shown as unearned income and, in our opinion, represent income applicable to the ensuing year, except that portion which will be credited to the Medico-Legal Defense Fund when it is determined the share of the 1937 dues that shall be allocated to that fund.

A separate exhibit included herein shows in summary the changes in the Medico-Legal Defense Fund during the year. Attention is directed to the fact that disbursements of this fund exceeded receipts in the amount of \$1,047.90. During the year, only fifty cents of each member's annual dues were credited to this fund. During the previous fiscal year, \$1.50 of each member's annual dues was credited. However, a reduction of \$1,619.50 in the reserve to reduce securities of this fund to quoted market values resulted in a net increase of \$571.60 in the Reserve for Medico-Legal Defense Fund.

Surety bonds on officials and an employee of the Society at December 26, 1936, were as follows:

Medical Secretary	\$15,000.00
Treasurer	35,000.00
Executive Secretary	5,000.00
Bookkeeper	5,000.00

Operations

We have made an examination of the statement of income and expense for the fiscal year ended December 26, 1936, and in connection therewith we examined or tested accounting records of the Society and other supporting evidence and obtained informa-

SOCIETY ACTIVITY

tion and explanations from the Executive Secretary and bookkeeper; we also made a general review of the accounting methods and of the operating and income accounts for the year. The scope and extent of our tests of the detail of transactions during the year are outlined in a later section of this report.

A statement comparing the net income for the fiscal year ended December 26, 1936, with the net income for the prior year and a comparative statement of expenses for the two years are included herein.

The increase in the income for the year over the income for the previous year results primarily from three factors: an increase in the annual dues from \$8.50 per year to \$10.00 per year, a decrease in the portion of annual dues allocated to the Medico-Legal Defense Fund from \$1.50 per member to \$.50 per member, and an increase in advertising income of the JOURNAL.

Increased activities of the Society during the year are responsible for increased expenses classified as administrative and general and society activities. Committee expenses decreased in total as a result of a large decrease in the expenses of the Legislative Committee. The expenses in connection with the JOURNAL increased approximately in proportion to the increased income attributable to that magazine.

Scope of Examination

The scope and nature of our examination and the extent of the tests of the detail transactions are outlined in the following comments:

Cash on hand was counted on the morning of December 28, 1936. Cash on deposit was verified by reconciliation of the amount reported by the depository bank to the amount shown herein. Recorded cash receipts for several months of the year were

traced to the deposits shown by the bank statements on file. The recorded cash disbursements for three months selected by us were compared with canceled bank checks, invoices and other memoranda. To the extent of the tests made no irregularities were disclosed.

Notes receivable were inspected by us during the course of our examination. Accounts receivable were found to be in agreement with trial balances of the individual accounts. We did not correspond with any of the debtors to confirm the correctness of the book records.

Securities owned were inspected by us and market quotations were obtained to ascertain their approximate market value at December 26, 1936.

We did not correspond with creditors to verify the liabilities of the Society, but we reviewed the receipts and disbursements of the Joint Committee on Public Health Education and of the Medico-Legal Defense Fund.

In addition to the tests heretofore outlined we tested the amount of dues collected by comparison with the record of membership certificates issued and with other membership records. Interest received was verified by inspection of unclipped coupons. Tests were made of advertising income by comparison of billings for advertising with space used in several issues of the JOURNAL. We also reviewed the items charged to the major expense accounts during the year.

In our opinion, based upon our examination, the accompanying balance sheet and statement of income fairly present the position of the Society at December 26, 1936, and the results of its operations for the year.

ERNST & ERNST,
January 16, 1937. *Certified Public Accountants.*

BALANCE SHEET MICHIGAN STATE MEDICAL SOCIETY DECEMBER, 26, 1936

Assets		
Cash		
On hand.....	\$ 42.73	
On deposit—Lansing National Bank.....	1,797.93	
Certificate of deposit—Lansing National Bank.....	5,000.00	
		\$ 6,840.66
Notes and Accounts Receivable		
Notes receivable for dues.....	\$ 87.50	
Accounts receivable:		
Advertisers and exhibitors.....	\$ 1,321.59	
County societies	91.80	
	1,413.39	
	\$ 1,500.89	
Less allowance for doubtful.....	625.00	
		875.89
Inventories		
"Medical History of Michigan".....		918.00
Securities		
Stocks and bonds—at cost.....	\$45,253.75	
Less allowance to reduce to quoted market values.....	13,917.75	
	\$31,336.00	
Uncashed matured coupons on bonds not in default.....	365.00	
		31,701.00
		\$40,335.55
Liabilities		
Accounts Payable		
For current expenses, etc.....	\$ 2,738.91	
Advance for reprints.....	11.50	
		\$ 2,750.41
Liability for Funds Administered		
Couzens' Foundation.....	\$ 39.37	
Joint Committee on Public Health Education.....	992.01	
		1,031.38
Unearned Income		
Dues for the year 1937.....		830.00
Reserve		
For Medico-Legal Defense Fund.....		15,984.84
Net Worth		
Balance at December 29, 1935.....	\$15,567.11	
Net income for the year ended December 26, 1936.....	2,974.31	
Reduction in allowance to reduce securities to quoted market values.....	1,197.50	
		19,738.92
		\$40,335.55

This balance sheet is subject to the comments contained in this report.....

SOCIETY ACTIVITY

INCOME AND EXPENSE MICHIGAN STATE MEDICAL SOCIETY

Income

	FISCAL YEAR ENDED		Increase Decrease
	Dec. 26, 1936	Dec. 28, 1935	
Membership fees	\$29,443.76	\$19,528.29	\$ 9,915.47
Journal subscriptions	5,681.92	5,477.09	204.83
Advertising sales	10,048.55	8,051.31	1,997.24
Reprint sales	1,559.81	1,687.75	127.94
Interest received and profit on sale of securities	1,291.80	932.89	358.91
Journal cuts sold	154.45	279.46	125.01
Miscellaneous income	10.87	30.30	19.43
	<u>\$48,191.16</u>	<u>\$35,987.09</u>	<u>\$12,204.07</u>

Expenses—As Shown By Exhibit

Administrative and general office	\$15,857.10	\$10,001.68	\$ 5,855.42
Society activities	7,028.03	4,541.34	2,486.69
Committee expenses	5,479.82	6,194.58	714.76
Journal expenses	16,193.76	14,383.24	1,810.52
	<u>\$44,558.71</u>	<u>\$35,120.84</u>	<u>\$ 9,437.87</u>

Other Deductions

Bad accounts charged off and provided for or compromised, less recoveries	\$ 68.48	\$ 143.30	\$ 74.82
Adjustment of inventory valuation	589.66	.....	589.66
	<u>\$ 658.14</u>	<u>\$ 143.30</u>	<u>\$ 514.84</u>
	<u>\$45,216.85</u>	<u>\$35,264.14</u>	<u>\$ 9,952.71</u>
NET INCOME	\$ 2,974.31	\$ 722.95	\$ 2,251.36

EXPENSES MICHIGAN STATE MEDICAL SOCIETY

	FISCAL YEAR ENDED		Increase Decrease
	Dec. 26, 1936	Dec. 28, 1935	
Administrative and General			
Secretary's salary	\$ 2,477.05	\$ 4,000.00	\$ 1,522.95
Executive secretary's salary	6,000.00	1,000.00	5,000.00
Other office salaries	3,383.25	2,506.50	876.75
Office rent	720.00	740.00	20.00
Printing stationery and supplies	1,023.76	668.55	355.21
Postage	1,013.91	231.25	782.66
Auditing	248.08	246.38	1.70
Insurance and fidelity bonds	186.39	74.26	112.13
Furniture and equipment purchased	321.04	143.96	177.08
Moving and storage expense	24.00	133.67	109.67
Telephone and telegraph	302.18	243.06	59.12
Unclassified	157.44	14.05	143.39
	<u>\$15,857.10</u>	<u>\$10,001.68</u>	<u>\$ 5,855.42</u>
Society Activities			
Council expenses	\$ 2,334.19	\$ 1,621.19	\$ 713.00
Delegates to American Medical Association	493.19	485.07	8.12
Secretaries' conference	638.23	443.43	194.80
Traveling expense	1,812.12	812.20	999.92
Reporting annual meeting	204.14	227.01	22.87
Publications	626.79	.....	626.79
Honorarium	500.00	.....	500.00
Memorial plaque	64.72	.....	64.72
Sundry society expense	545.12	259.44	285.68
	<u>\$ 7,218.50</u>	<u>\$ 3,848.34</u>	<u>\$ 3,370.16</u>
Less excess of income from annual meeting over expenses thereof	190.47	693.00	883.47
	<u>\$ 7,028.03</u>	<u>\$ 4,541.34</u>	<u>\$ 2,486.69</u>
Committee Expenses			
Legislative committee	\$ 835.88	\$ 3,543.76	\$ 2,707.88
Post-graduate conference	1,302.75	954.50	348.25
Contribution to Joint Committee on Public Health Education	500.00	500.00	.....
Economics committee	717.78	724.23	6.45
Maternal welfare committee	390.34	103.80	286.54
Public relations committee	1,031.01	69.60	961.41
Cancer committee	270.07	378.85	108.78
Preventive medicine committee	150.17	241.35	91.18
Goitre committee	100.00	.....	100.00
Sundry other committees	181.82	4.00	177.82
	<u>\$ 5,479.82</u>	<u>\$ 6,520.09</u>	<u>\$ 1,040.27</u>
Less unexpended portion of contribution in prior year to economics committee ..	.....	325.51	325.51
	<u>\$ 5,479.82</u>	<u>\$ 6,194.58</u>	<u>\$ 714.76</u>
Journal Expenses			
Editor's salary	\$ 3,000.00	\$ 3,000.00	\$
Editor's expense	600.00	.....	600.00
Printing	9,593.73	8,525.79	1,067.94
Reprints	1,147.03	1,409.53	262.50
Discount and commission on advertising sales	1,653.00	1,297.92	355.08
Postage	200.00	150.00	50.00
	<u>\$16,193.76</u>	<u>\$14,383.24</u>	<u>\$ 1,810.52</u>
TOTAL	<u>\$44,558.71</u>	<u>\$35,120.84</u>	<u>\$ 9,437.87</u>

SOCIETY ACTIVITY

RECEIPTS AND DISBURSEMENTS—JOINT COMMITTEE ON PUBLIC HEALTH EDUCATION MICHIGAN STATE MEDICAL SOCIETY FISCAL YEAR ENDED DECEMBER 26, 1936

Balance Due Joint Committee—December 29, 1935..... \$ 998.94

Receipts

The Detroit News—for articles published.....	\$ 999.96	
Contributions:		
Children's Fund of Michigan.....	\$ 1,500.00	
Michigan State Medical Society.....	500.00	
		<u>2,000.00</u>
		2,999.96
		<u>\$ 3,998.90</u>

Disbursements

Salaries:	\$ 1,200.00	
Mabel Kelly	900.00	
Herman Rucker, M.D.....		\$ 2,100.00
Don E. Lyons, M.D.....		108.00
Expense in connection with "Cancer" booklet published in conjunction with the Cancer Committee of the Michigan State Medical Society.....		500.00
Miscellaneous		298.89
		<u>3,006.89</u>

BALANCE DUE JOINT COMMITTEE—December 26, 1936..... \$ 992.01

MEDICO-LEGAL DEFENSE FUND MICHIGAN STATE MEDICAL SOCIETY FISCAL YEAR ENDED DECEMBER 26, 1936

Balance—December 29, 1935..... \$15,413.24

Disbursements

Douglas, Barbour, Dusenberg & Purdy—legal services.....	\$ 2,392.04	
William J. Stapleton, Jr.—salary.....	999.96	
Miscellaneous	8.11	
		<u>\$ 3,400.11</u>

Receipts

Dues from members.....	\$ 1,866.58	
Interest received	485.63	
		<u>2,352.21</u>
		1,047.90
		<u>\$14,365.34</u>
Reduction in allowance to reduce securities to quoted market value.....		1,619.50
		<u>\$15,984.84</u>

BALANCE—December 26, 1936.....		\$15,984.84
Represented by:		
Securities owned (at quoted market value).....	\$15,211.00	
Balance, included in assets of the general fund.....	773.84	
TOTAL		<u>\$15,984.84</u>

RECONCILEMENT OF NET WORTH MICHIGAN STATE MEDICAL SOCIETY DECEMBER 26, 1936

Net Worth—December 26, 1936, as shown by the Society's books..... \$21,377.81

Deductions

Unentered liabilities	\$ 2,481.11	
Adjustment of inventory.....	589.66	
Adjustment of accounts receivable and allowance for doubtful accounts.....	77.40	
Undistributed disbursements included in petty cash.....	4.72	
		<u>\$ 3,152.89</u>

Additions

Reduction in allowance to reduce securities to quoted market values.....	\$ 1,197.50	
Adjustment to take into income as interest received, value of matured bond coupons which were not cashed at December 26, 1936.....	315.00	
Adjustment of prepaid dues.....	1.50	
		<u>1,514.00</u>
		1,638.89
		<u>\$19,738.92</u>

NET WORTH—December 26, 1936, as shown by this report.....

MINUTES OF MEETING OF LEGISLATIVE COMMITTEE

December 9, 1936

1. *Roll Call.*—The meeting was called to order by Dr. L. G. Christian, Chairman, at 2:30 p. m., in the W. C. M. S. Building, Detroit. Those present: Dr. Christian, Lansing; Drs. A. S. Brunk, Detroit; P. R. Urmston, Bay City; I. W. Greene, Owosso; H. R. Carstens, Detroit; L. Fernald Foster, Bay City; J. H. Dempster, Detroit; Wm. A. Hyland, Grand Rapids; F. B. Burke, Detroit; H. H. Cummings, Ann Arbor; L. J. Gariepy, Detroit; T. K. Gruber, Eloise; M. H. Hoffman, Detroit; Paul Klebba, Detroit; also Executive Secretary Wm. J. Burns. Absent: Drs. P. A. Riley, Jackson, and J. B. Bradley, Eaton Rapids.

2. *Minutes.*—The minutes of the meetings of November 10 and of December 6, 1936, were approved as printed and sent to the members.

3. *Proposed Basic Science Bill.*—The final draft of the proposed Basic Science Bill was studied and slightly amended.

Motion of Drs. Cook-Burke that the bill as amended today be approved and submitted to the Executive Committee of the Council. Carried unanimously.

4. *Plans for 1937.*—The Committee discussed the various important items connected with activity in the ensuing year.

5. *Occupational Diseases.*—The Chairman of the Advisory Committee on Occupational Diseases, Dr. Paul Klebba, reported that Labor will insist on a bill to compensate occupational diseases; sixteen states now have some type of occupational disease law. He gave the attitude of Labor and industry, relative to various types of occupational disease laws, and stated that the medical profession has a large interest in such a proposal. Dr. Klebba suggested that the medical profession should favor some occupational disease bill in which is set up a non-political medical board.

6. *Group Hospitalization.*—The proposed bill of the Michigan Hospital Association was studied by the committee. Motion of Drs. Burke-Hyland that a copy of this proposed bill be sent to all members of the Legislative Committee for further consideration. Carried unanimously.

7. *Adjournment.*—The meeting was adjourned at 5:20 p. m.

MINUTES OF MEETING OF COMMITTEE ON MEDICAL ECONOMICS

December 9, 1936

1. *Roll Call.*—The meeting was called to order at 1:45 p. m., by Chairman Dr. R. H. Pino, in the W.C.M.S. Building, Detroit. Present were: Drs. Pino, Detroit; J. M. Robb, Detroit; C. S. Tarter, Bay City; L. G. Christian, Lansing; Henry Cook, Flint; Harold Miller, Lansing; President Henry E. Perry, Newberry; Secretary L. Fernald Foster, Bay City; S. W. Insley, Detroit; F. E. Reeder, Flint; F. A. Baker, Pontiac; R. G. Tuck, Pontiac. Absent: Dr. C. S. Toshach, Saginaw.

2. *Dr. Pino* outlined the report of Dr. Wm. Haber at hearing of the Governor's Welfare and Relief Study Committee.

He also ran through the agenda to bring all doctors up to date on various subjects.

Item 1—Dr. Haber's report read in full and items commented on by various members present.

The report anticipates \$40,000,000 minimum welfare load in Michigan. It recommended centraliza-

tion of welfare in Lansing, with one agency in each county to look after local details.

Compensation cases discussed—employees cannot waive compensation rights under present law. Suggest change to permit waiving of rights in order that many so-called "unemployables" may be returned to useful occupations.

Item 2—Dr. Insley's report to the Governor's Welfare and Relief Study Commission.

Report read in full—items commented on.

Recommended that full time representative of medicine sit on State Board, to act as administrator only (no diagnosis or treatment). Much discussion on this point as it might affect local county units.

Item 3—Dr. Tuck's report—read in full and items discussed.

Moved by Dr. Insley, seconded by Dr. Tarter that: In view of the material contained in Dr. Haber's address, designated as Exhibit A, and the material of Dr. Insley, designated as Exhibit B, and Dr. Tuck's report, designated as Exhibit C, we hereby recommend to the Executive Committee of Michigan State Medical Society change in the state's welfare laws: (1) Exhibit C as amended.

Recommendation (2). That the state Society's Executive Committee, in coöperation with other allied groups, employ qualified legal talent to draw up proper legislation in connection with the proposed change in the State's Welfare commission.

Recommendation (3). That suitable publicity be employed in furtherance of this program.

Item 4—Report of Special Committee on Evaluation of the Wayne County Medical Service Bureau.

Descriptive articles and a copy of the above report was given to every member of the committee present, to study at his leisure.

Item 5—Discussion of letter from Utah State Medical Society relative to the activity of the Farm Bureau of that state. It appears that the Farm Bureau of Utah is in a mood to demand medical service to all their members. The possible influence of such action, should it spread to all the states, in influencing legislation is something we should take cognizance of. It occurs to the Economics Committee that consideration might well be given to a program to have in readiness in every county with speakers to attend Grange and other farm organization meetings to educate the farmers as to the disadvantages of socialized medicine.

Item 6—Diagnostic clinics. This item only mentioned and held over for further consideration.

R. H. PINO, M.D., *Chairman.*

MINUTES OF MEETING OF ADVISORY COMMITTEE ON POSTGRADUATE EDUCATION

December 9, 1936

The Committee was called to order in the Wayne County Medical Building, Detroit, By Dr. James D. Bruce. Luncheon at 1:00 o'clock. Those attending were: Drs. James D. Bruce, Chairman; Raymond B. Allen, Andrew P. Biddle, C. T. Ekelund, Grover C. Penberthy, R. H. Pino, J. H. Powers, C. C. Slemmons, Richard R. Smith, H. H. Cummings. Dr. Cummings acted as secretary. Dr. Henry Cook, Dr. Frank Reeder, and Dr. J. M. Robb sat in with the committee.

The chairman gave a résumé of replies received from practitioners in response to a request for opinions of the 1936 postgraduate series and suggestions for next year. The first 141 replies were studied, with the thought that this would afford a

fair cross-section of the large number which are continuing to come in. About 25 per cent of the replies favored changing the lecture period from 10 a. m. until 3 p. m. to 1 until 5 p. m. About 10 per cent favored three speakers instead of two. About 2 per cent favored the exhibition of patients other than in discussions on dermatology. About the same number favored six lecture periods instead of eight. A number favored beginning the course as early as possible in September. The principal reasons given for this were that most of the men had returned from their holidays by early September; that the continuance of the course into late November and, occasionally, December, resulted not infrequently in night driving in returning home; that after the 15th of November, weather conditions were likely to be unfavorable. While this number was not in a majority, it was large enough and the reasons given important enough to warrant careful consideration by the committee.

A number of physicians who had expected to attend regularly, but who by reason of illness or other unavoidable circumstances were unable to complete the required attendance thus forfeiting their right to credit and the lecture series volume, thought they were being unjustly penalized.

The replies to our form letter have been more numerous this year than in previous years, and the comments and suggestions appear to be much more carefully considered. This, as well as the co-operative spirit and the whole-hearted approval of the post graduate program by all, is gratifying.

Dr. Pino expressed the opinion that free clinics would probably be continued throughout the State, and suggested that Dr. Jennings be permitted to continue the study of these clinics in the more populous centers, with the view of suggesting means whereby they might be used for teaching purposes.

Dr. Allen thought it important to continue the instruction in emergency and minor surgery, particularly in fractures. He also proposed the topics of infant feeding and the management of premature infants for next year.

Dr. Smith felt that inasmuch as infant feeding had been dealt with in one of our meetings that it might properly be deferred, at least until other important subjects had been presented. He also expressed the view that in such subjects as gall bladder disease and in peptic ulcer, which may be in the field of internist and surgeon, that both medical and surgical views should be presented.

The subject of endocrinology received general discussion. It was recommended that consideration be given to a review of this field in the coming year. Dr. Allen brought up for discussion, three other subjects, intestinal obstruction, arthritis, and an evaluation of laboratory methods.

Dr. Ekelund suggested the general consideration of cancer and called attention to the splendid symposium offered by Dr. Gould and other members of the profession associated with the Eloise institution.

Dr. Slemons spoke of the great interest of the physicians in the northern part of the lower peninsula in the program on obstetrics, given this autumn by Dr. Alexander M. Campbell and Dr. Norman F. Miller. On account of the short time for arrangements and the necessity for giving these courses before late autumn, there was occasional conflict with the regular postgraduate program. In next year's program, the committee stated that no such conflict would occur.

A request was made from Bay City for Friday instead of Monday. It was suggested that arrangements might be made with the Traverse City-Manistee-Cadillac group for an exchange of days.

A number of men in their replies suggested giving

an examination on the subject-matter of the lecture course as a means of evaluating their progress. The feeling was quite general that such an examination would not prove practical but might be an interesting experiment.

The Northern Michigan Medical Society has forwarded the following suggestions: *First.* Continue the plan of eight meetings a year, with two speakers each day. *Second.* Divide the meetings equally between Cadillac, Manistee, Traverse City and Petoskey. *Third.* Meetings to begin at 1 p. m. and include a dinner at 5 o'clock. *Fourth.* Begin the series as early as possible in September. The members feel that these changes will stimulate attendance.

The method of notification of physicians of these courses was discussed. Notwithstanding every registered physician in the state is mailed from one to two notices about two weeks in advance, and that for one or two months prior to the beginning of the course, notice is given in THE JOURNAL, a considerable number of physicians require further notification. It was suggested that the councilor and local secretaries take this matter in hand and see to it that adequate notice come from local areas as well as from the central office.

Summary. There was general agreement upon the content of the 1937 program; also, that the course of eight days, with the present hours, should be continued except in the northern district, where the hours are to be from 1 to 4 p. m.; that Petoskey be added to the Traverse City-Manistee-Cadillac centers, with two days each; that if after beginning the course, a physician be prevented from attending through illness or an unavoidable cause, he receive the lecture series volume upon application, but not be given credit; that Alpena be given four speakers during the winter, the expense of these to be defrayed from State Society funds.

H. H. Cummings, M.D., *Secretary.*

MINUTES OF MEETING OF ADVISORY COMMITTEE ON SYPHILIS CONTROL PROGRAM

December 20, 1936

1. *Roll Call.*—The meeting was called to order in Ann Arbor by Dr. Loren Shaffer, Chairman, at 2:40 p. m. Those present were: Drs. Shaffer, Detroit; R. S. Dixon, Detroit; John Lavan, Grand Rapids; Udo J. Wile, Ann Arbor; also present were: Dr. A. P. Biddle, Detroit; Dr. L. O. Geib, Detroit, Chairman, Preventive Medicine Committee, and Don W. Gudakunst (representing Dr. Henry F. Vaughan, Detroit Commissioner of Health), members of the advisory group to this Committee, Dr. C. K. Valade, Detroit, and Executive Secretary Wm. J. Burns. Absent were: Drs. C. R. Hill, Battle Creek, and Dr. C. C. Slemons, advisor.

2. *Syphilis Control Program.*—The Chair read a letter of November 30 from Surgeon General Thomas Parran, asking each State Committee to "(a) review the available information on the syphilis problem in the state; (b) cooperate in assembling necessary additional information concerning the nature and extent of the facilities which now exist for the diagnosis, treatment, and public health control of syphilis; (c) recommend such supplemental and new state and local facilities and measures as seem desirable in dealing with this infection which is nation wide in its importance and distribution."

The following questions for solution in syphilis control, as forwarded by Dr. Parran, were given individual study and answer as follows:

SOCIETY ACTIVITY

- (1) Q. The system of notification most suitable to physicians, patients, and health agencies?
 - A. We favor *mandatory* notification but it should be in the most simple form. The Federal Government should supply franked envelopes and forms to physicians. We recommend a uniform system for all states. Very simple: name or initials, address, age, sex, state of disease, marital status. Reports should be sent to the State Board of Health, except in those communities requiring local notification.
- (2) Q. The additional laboratory facilities needed for diagnosis of syphilis?
 - A. (1) We believe the State of Michigan to be adequately provided for the serological diagnosis of syphilis: (a) by state laboratories; (b) by various accredited hospitals; (c) and by the approved private laboratory facilities.
(2) We believe that serological investigation should be available free for all indigent cases. This may be provided, as now by the State Laboratories and by a suggested system of subsidy to recognized approved private laboratories in various parts of the state.
(3) We strongly urge that no single biological test be used to the exclusion of a suitable check, and we further recommend that all hospitals and all private laboratories, as well as the State Laboratories, conduct a serological test with the same methods and the same serological system.
(4) The principle is recommended that the dark field be made more available for the diagnosis of primary syphilis, and that further personnel be trained at recognized centers and used in outlying communities.
- (3) Q. The policy recommended in the distribution of anti-syphilitic drugs?
 - A. We believe that standard drugs for the treatment of syphilis should be made available, free of charge, to the physicians of the state through the State Department of Health.
- (4) Q. The adequacy of free treatment facilities for those who cannot pay physician's fees?
 - A. The State of Michigan has not adequate facilities for those who cannot pay physician's fees.
- (5) Q. The nature and extent of the additional facilities needed?
 - A. We recommend the additional principle of compensating the private physicians for the care of indigent patients on a per visit basis.
- (6) Q. The physician's part in the application of epidemiologic methods for the control of syphilis?
 - A. The physician is a local epidemiologist as far as the infectious cases under his control are concerned. If he is assured that he will be paid for additional cases found by him, he will locate sources and contacts.
- (7) Q. The possibility of developing minimum standards of treatment of early syphilis?
 - A. We recommend the principle of minimum standards of treatment for early syphilis, but suggest that such standards be limited to a total grams-grains, administered per time interval.
- (8) Q. The availability of hospital beds for treatment of cases needing hospitalization?
 - A. Sufficient beds are not available for adequate treatment or control of either early or late syphilis requiring hospitalization.
- (9) Q. Methods for the more adequate prevention of congenital syphilis through recognizing and treating the disease among pregnant women?
 - A. We recommend an extended educational campaign to physicians to insist on physicians doing routine blood tests early in pregnancy. Where such tests are found to be positive, the expectant mothers are to be treated through the pregnancy according to accepted standards. It is recommended that in the State Birth Certificate there be included the question: "Has a blood test been taken on this woman during her pregnancy?"
- (10) Q. The lines along which informative and educational programs should be conducted?
 - A. The educational and informative program is in such a state of flux that while we believe that the real control of syphilis lies largely in the correct dissemination of information and in a rational educational program, we have no specific recommendation to make on this point.
- (11) Q. The possibilities of prophylactic measures being taught and administered through physicians' offices, out-patient hospital services and clinics, with the thoroughness and precautions governing Army and Navy procedures.
 - A. We believe that prophylactic measures may be adequately taught through physicians and various proper agencies. The administration of prophylactic measures through physicians' offices, hospitals and clinics, could only adequately be carried out through 24-hour service. We subscribe to the value of properly carried-out prophylactic measures as a factor of value in the program of prevention.

The above was unanimously approved by the Committee, on motion of Drs. Wile-Lavan.

The Executive Secretary was instructed to send a copy of these minutes to each member of the Committee, to each member of the Executive Committee of The Council and to Surgeon-General Thomas Parran.

3. *Adjournment.*—The meeting was adjourned at 5:50 p. m.

MINUTES OF MEETING OF COMMITTEE ON MATERNAL HEALTH

December 20, 1936

1. A meeting of the Committee on Maternal Health was held at the Hotel Olds, in Lansing, on December 20. The following members of the Committee were present: Dr. Alexander M. Campbell, Chairman; Dr. Norman Miller, Dr. Ward Seeley, Dr. Harold Wiley. Dr. Harold Furlong was absent. Dr. Carroll Palmer, United States Public Health Service, was present and discussed with the Committee some methods of classification and evaluation of the information contained in the obstetric survey blanks and his recommendations were concurred in by the Committee.

2. Considerable time was spent in considering methods whereby physicians who are dilatory in completing and returning their survey blanks could be encouraged and stimulated to complete them at an early date. It was suggested that Mr. Wm. J. Burns be asked to write the chairman of each Maternal Health Committee of his County Medical Society concerning this matter and that a list be given, indicating the doctors who have not made returns of their blanks. It was revealed that over 7,000 blanks have already been returned and agreed that, inasmuch as Wayne County has received about one-third of the survey blanks sent out, an intensive effort should be made by telephone and personal contact to reach every physician in Wayne County who has not completed his blanks.

3. The Chairman, Dr. Campbell, reported that a tentative budget was asked for and submitted to the Finance Committee of the Council.

4. It was agreed to hold the next meeting in Detroit about the middle of January, 1937.

JOINT MEETING OF COMMITTEE STUDYING FEE SCHEDULES A, B, C AND D WITH LIAISON COMMITTEE WITH HOSPITAL ASSOCIATION AND REPRESENTATIVES OF THE MICHIGAN HOSPITAL ASSOCIATION

January 8, 1937

1. *Roll Call.*—The meeting was called to order by Dr. Grover C. Penberthy at 7:45 p. m., in the Wayne County Medical Society Building, Detroit. Present were—for the Committee Studying Schedules A, B, C, and D: Dr. Penberthy, Dr. E. R. Witwer. For the Liaison Committee: Dr. T. K. Gruber, Dr. H. S. Collisi, Dr. Dean Hart (and Dr. Witwer). For the Hospital Association: Dr. Morrill, Dr. W. L. Babcock, Dr. J. Stuart Hamilton, Dr. W. L. Quennell. Also Chairman of the Council P. R. Urmston, Secretary L. Fernald Foster, Councillor A. S. Brunk, Chairman of the Medical Economics Committee R. H. Pino, and Executive Secretary Wm. J. Burns.

2. *Discussion of Fee Schedules.*—Dr. Penberthy presented the background of actions leading up to the present discussion of Fee Schedules, A, B, C, D, stating that the Crippled Children Commission and the Finance Committee of the State Administrative Board had approved the Fee Schedule revision of the Michigan State Medical Society in all items except the inclusion of the roentgenologists' fee schedules. Dr. Witwer gave the viewpoint of the Michigan Association of Roentgenologists. General discussion brought out the fact that one flaw in presenting arguments to governmental agencies was that the medical group and the hospital group acted independently, which was to the disadvantage of each group. Another point, brought out by Dr. Morrill, was that the whole matter seemed to be dominated by detail men in the Auditor General's office.

Motion of Drs. Collisi-Gruber that a *special joint committee of five, two from the Michigan Hospital Association, two from the Michigan State Medical Society, and one from the Michigan Association of Roentgenologists (appointed by the president of their respective organizations), present the medical and hospital viewpoint toward the solution of, the Crippled Child, the Afflicted Child and the Afflicted Adult problems to the appropriate State or County governmental agencies to the end that a united stand*

be taken at all times by these three groups in these matters of mutual interest. Carried unanimously.

3. *Michigan Hospital and Medical Service Bureau.*—This proposed clearing-house of papers and red tape connected with the presentation of bills for medical and hospital care of Crippled and Afflicted Children, as proposed by Mr. Marsland, of the Auditor General's office, was discussed by the committees present. It was brought out that bills for hospital as well as medical care are being sent by various hospitals throughout the state at rates less than the fee schedule, and the necessity for publishing the fee schedule and disseminating it to physicians and hospitals was brought out by Secretary Foster. The suggestion that a physician be employed in the Auditor General's office to aid with interpretation of medical statements was also suggested. Dr. Morrill suggested that *one State* agency should be responsible for fee schedules; the present system whereby two or more governmental agencies have joint responsibility is most unsatisfactory. The committees asked that a report of these proceedings be presented to The Council of the Michigan State Medical Society at its Midwinter Meeting.

4. *Adjournment.*—Dr. Penberthy thanked all for their advice and attendance. Dr. Gruber expressed appreciation to the members of his Liaison Committee for coming to this meeting from great distances. The meeting was adjourned at 10:30 p. m.

COUNTY SOCIETIES

BAY COUNTY

A. L. ZILIAK, M.D.
Secretary

The Annual Meeting of the Bay County Medical Society was held at the Wenonah Hotel, Bay City, Michigan, at 6 P. M., December 16, 1936. The complimentary banquet given by retiring president, Dr. M. C. Miller, was preceded by a short business meeting held solely for the purpose of election of officers for the ensuing year, and presentation of reports.

The following officers were elected:

President—Dr. A. D. Allen.
President-elect—Dr. C. L. Hess.
Secretary-Treasurer—Dr. A. L. Ziliak.
Censor—Dr. V. H. Dumond.
Delegate to M.S.M.S.—Dr. R. C. Perkins.
Alternate to M.S.M.S.—Dr. M. C. Miller.
Medico-legal committeeman—Dr. E. A. Witwer.

The attendance was the largest on record for an annual meeting of this society. There were fifty-five members and seventeen guests present. The array of state officers was of sufficient number to do justice to a state meeting. These included:

Dr. Henry Cook, Flint, President-elect M.S.M.S.
Dr. P. R. Urmston, Bay City, Chairman of the Council, M.S.M.S.
Dr. Wm. Hyland, Grand Rapids, Treasurer, M.S.M.S.
Dr. L. Fernald Foster, Bay City, Secretary, M.S.M.S.
Mr. Wm. J. Burns, Lansing, Executive Secretary, M.S.M.S.
Dr. Vernor Moore, Grand Rapids, Councillor.
Dr. Fred B. Burke, Detroit, President-elect, Wayne County Medical Society, and Chairman of the Ethics Committee, M.S.M.S.
Dr. Thos. K. Gruber, Detroit, President Wayne County Medical Society.
Dr. Paul Klebba, Detroit, Chairman of the Committee on Occupational Diseases.
Dr. Verne Wenger, Grand Rapids, Member Public Relations Committee, M.S.M.S.

Open house was held at the home of the host, Dr. Miller, Auburn, Mich., following the banquet.

JOUR. M.S.M.S.

COUNTY SOCIETIES

CALHOUN COUNTY

WILFRID HAUGHEY, M.D.

Secretary

Meetings

Tuesday, January 5, 1937—First meeting of the Calhoun County Medical Society. Dinner at Post Tavern, 6:30. Meeting, 8:30 P. M. Program by Cancer Committee of the Michigan State Medical Society.

Tuesday, January 12, 1937—Staff meeting, Leila Hospital, 8:20. This is the annual meeting and election of officers. Two movies: Eugenics, Emergencies and Two movies: Empyemias and Action of Ergotate.

Tuesday, January 19, 1937—Staff meeting, 8:15 P. M.

Tuesday, January 26, 1937—Battle Creek Academy of Medicine and Dentistry.

Minutes

The annual meeting was called to order at the Kellogg Hotel at 6:15 p. m., December 1, 1936, by President R. C. Winslow.

By motion of Dr. Melges, seconded by Dr. Brainard, the minutes of the last meeting were adopted as printed in the Bulletin.

Under reports of officers, Dr. Wilfrid Haughey read the secretary and treasurer's annual report.

Several communications were read from state officers regarding Legislative Committee meeting at Lansing, December 6, and Panel Discussion on Economics in Detroit, December 9.

There being no unfinished business, the chair declared the election the next order of business and called for nominations for president. The election proceeded in regular order, the following being nominated as stated and elected unanimously:

President—C. W. Brainard, by Melges and H. M. Lowe.
Vice President—J. E. Rosenfeld, by Melges and Fraser.
Secretary-Treasurer—Wilfrid Haughey, by H. Hansen and Stiefel.

Delegate (2 years)—A. T. Hafford, by H. M. Lowe and Stiefel.

Alternate—William Dugan, by H. Hansen and Sleight.

Dr. Cooper made the election motion in each case, except the last, when Dr. Melges officiated.

A delicious dinner followed the meeting, after which Harlan Cleaveland favored us with several songs accompanied by Mrs. Helen Wiegwick.

Dr. Winslow made his exaugural address, thanking those with whom he has worked for their co-operation and aid, and mentioning several for especial comments. He turned the program over to Dr. Melges, chairman of the Program Committee, who introduced Dr. Ernest O. Melby, Dean of Education, Northwestern University, who talked on "Recent Trends in Education," stressing the growing feeling that the personal touch, the study of the individual, is increasingly important. It is more important that a teacher know how to get along with a pupil than that he know his subject profoundly. He has to live with that child five hours a day, and his success depends on his ability to do so.

There were present thirty-six at the business meeting and ninety-two at the dinner. Several came to hear the lecture.

GENESEE COUNTY

C. W. COLWELL, M.D.

Secretary

OFFICERS, 1936-1937

President—A. Thompson.
President-elect—A. MacArthur.
Secretary—C. W. Colwell.

Treasurer—V. H. Morrissey.
Medico-Legal Officer—H. E. Randall.
Delegates—R. D. Scott, D. Brasie, F. E. Reeder.
Alternate Delegates—D. Wright, D. Kirk, R. S. Halligan.
Counselor—Henry Cook.

The regular meeting of the Genesee County Medical Society, was held at Hurley Hospital on Wednesday, December 16, 1936.

The meeting was called to order by the president, Dr. Alvin Thompson. Minutes of the last meeting were read and approved.

Dr. Malfroid introduced Dr. Smith, who outlined the proposed program to be inaugurated in Genesee County in behalf of Maternal and Infant Welfare, sponsored by the Social Security Act, which was freely discussed by members of the Society.

Dr. Probert reported for the Committee on Preventive Medicine and moved that a list of physicians, willing to do immunization free of charge to those unable to pay, be furnished Dr. Olson immediately, this immunization being necessary for the present time only and possibly for four or five years. It was seconded by Dr. Rundles and passed unanimously.

Meeting adjourned.

GRATIOT-ISABELLA-CLARE COUNTIES

RICHARD L. WAGGONER, M.D.

Secretary

New officers and committees of the Gratiot-Isabella-Clare County Medical Society for 1937 are as follows:

President—Kenneth P. Wolfe, Breckenridge.
President-elect—Phillip R. Johnson, Mt. Pleasant.
Delegate—Myron Becker, Edmore.
Alternate Delegate—A. L. Aldrich, Ithaca.
Committee on Legislation & Public Policy—B. C. Hall, Pompeii; F. C. Dubois, Alma; Wm. R. Harrigan, Mt. Pleasant.
Committee on Annual Physical Examination—R. Wilcox, Alma; M. Budge, Ithaca; J. Sarven, Middleton.
Nominating Committee—A. Aldrich, Ithaca; M. Becker, Edmore; A. Hobbs, St. Louis.
Public Health Committee—L. Davis, Mt. Pleasant; P. Johnson, Mt. Pleasant; M. Faber, Ashley.
Economics Committee—B. Graham, Alma; C. Wood, Clare; C. Baskerville, Mt. Pleasant.

HOUGHTON-KEWEENAW-BARAGA COUNTIES

C. A. COOPER, M.D.

Secretary

The Houghton County Medical Society met at the Douglass House, Houghton, Tuesday, January 5, 1937, for the annual meeting and election of officers.

The meeting was called to order at 8:30 P. M., by president Quick. Seventeen members were present.

Minutes of the previous meeting were read and approved.

The secretary's books were examined by Drs. Sterne and Roche as an auditing committee, and found to be in order.

The following officers were elected:

President—L. E. Coffin, M.D., Painesdale.
Vice President—R. S. Buckland, M.D., Baraga.
Secretary-Treasurer—C. A. Cooper, M.D., Hancock.
Board of Censors for three years—J. R. W. Kirtan, Calumet.
Delegate to state convention—J. B. Quick, Laurium, with Dr. A. La Bine, of Houghton, as alternate.

A report on a meeting at Marquette on the proposed basic science law was given by Dr. H. M. Joy. Dr. Manthei also discussed some phases of the proposed law and urged united support.

The meeting adjourned at 10 P. M.

COUNTY SOCIETIES

INGHAM COUNTY

R. J. HIMMELBERGER, M.D.
Secretary

The annual meeting of the Ingham County Medical Society was held at the Hotel Olds, December 15, 1936. There were ninety-one members and guests present. Following the dinner the meeting was called to order by the president, Dr. E. I. Carr. The minutes of the previous meeting, as published in the *Bulletin*, were approved.

The following associate members were elected to membership:

Dr. R. J. Cook, Lansing.
Dr. N. K. McElmurry, Perry, Michigan.
Dr. L. C. Kraft, Leslie, Michigan.

Dr. Carr then presented copies of the proposed legislative bill on the Basic Science law.

The reports of the various committees and the officers were received and placed on file.

Under new business a resolution was presented which provided for a Trust Fund Board. This Board is to have charge of handling the Trust Fund with regard to investments, et cetera. Resolution passed.

The following new officers were elected:

Dr. D. M. Snell, president-elect.
Dr. R. J. Himmelberger, secretary.
Dr. T. I. Bauer, treasurer.
Dr. Harold Miller, medical director.
Dr. L. G. Christian, Dr. C. F. DeVries, Dr. R. L. Finch, delegates.
Dr. J. F. Sander, Dr. P. C. Strauss, Dr. C. D. Keim, alternate delegates.

The Trust Fund Board was elected with their terms of office as follows:

Dr. W. E. McNamara (five years).
Dr. E. I. Carr (four years).
Dr. F. M. Huntley (three years).
Dr. R. J. Morrow (two years).
Dr. B. D. Niles (one year).

Dr. Carr then presented the incoming president, Dr. Milton Shaw, with an engraved gavel. Dr. Shaw responded and as incoming president, took the chair.

There being no further business, the meeting was adjourned.

On January 21, 1937, the Ingham County Medical Society met at the Hotel Olds for the annual Presidents Night dinner in honor of the newly elected president, Dr. Milton Shaw.

There were about 164 members and wives present. During the dinner the members were entertained by several local artists with singing and dancing.

Following the dinner the Society enjoyed itself by dancing to the music of Nate Fry's orchestra.

LIVINGSTON COUNTY

H. L. SIGLER, M.D.
Secretary

Following is the list of officers of the Livingston County Society for 1937:

President—Hollis L. Sigler, Howell.
Secretary-Treasurer—Duncan C. Stephens, Howell.
Delegate—Harry G. Huntington, Howell.
Alternate Delegate—Jesse J. Hendron, Fowlerville.

The various committee members will remain unchanged.

MANISTEE COUNTY

C. L. GRANT, M.D.
Secretary-Treasurer

Manistee County Medical elected the following officers for 1937, at their meeting January 4, 1937:

President—Kathryn Bryan, Manistee.
Vice President—D. A. Jamieson, Arcadia.
Secretary-Treasurer—C. L. Grant, Manistee.
Delegate—E. A. Oakes, Manistee.
Alternate—L. W. Sweetzer, Manistee.

NEWAYGO COUNTY

W. H. BARNUM, M.D.
Secretary

The annual meeting of the Newaygo County Medical Society was held at the Kimbark Inn in Fremont, Dr. and Mrs. Holly of Muskegon and the wives of the members being guests of the Society.

After partaking of a bounteous dinner the meeting was called to order by the president, Dr. Guy Post of the county health unit.

The minutes of the last meeting were read and approved. The society then proceeded to the election of officers for the ensuing year with the result as follows:

President—Dr. A. C. Tompsett, Hesperia.
Vice President—Dr. Lambert Geerling, Fremont.
Secretary-Treasurer—W. H. Barnum, Fremont.
Delegate to M.S.M.S.—Dr. O. D. Stryker, Fremont.

A motion was made, supported and carried that the secretary pay the annual dues from society funds.

At this time Dr. Holly of Muskegon gave a very interesting illustrated lecture on the various types of cancer from the viewpoint of the surgeon and radiologist.

The meeting adjourned.

OAKLAND COUNTY

OTTO BECK, M.D.
Secretary

The election of officers for the year 1937 took place at the meeting held in Pontiac, December 15, 1936. Dinner was served at 6:30 P. M., after which followed the election. The new president-elect is Aaron Riker; secretary, Otto Beck; and treasurer, Hugh Williams. There are two new members of the Board of Directors. R. Y. Z. Aschenbrenner and H. A. St. John, while Loren Sheffield and Howard Barker remain as old members. Ernest Bauer and Clifford Ekelund were appointed delegates.

Dr. Albert C. Furstenberg, the guest speaker for the meeting of January 20, was born in Saginaw, Michigan, May 27, 1890. He received his preliminary education in the Saginaw public schools and his literary training at the University of Michigan, where he was given a B. S. degree. His medical education was also received at the University of Michigan Medical School from which he received his M.D. degree in 1915. The following four years were spent in post graduate study of Otolaryngology. Dr. Furstenberg has written scores of papers on this subject, as well as other phases of medicine. He is now professor of Otolaryngology and Dean of the School of Medicine at the University. He is a member of the American Laryngological Society, the American Otological Society, the Wash-tenaw County and Michigan State Medical Society, and the American Medical Association.

SAGINAW COUNTY

W. K. ANDERSON, M.B.
Secretary

The officers of the Saginaw County Medical Society for 1937 were elected December 17, 1936, as follows:

President—L. C. Harvie.
President-Elect—W. K. Anderson.
Secretary-Treasurer—H. C. Wallace.
Medico-Legal Adviser—W. J. O'Reilly.
Board of Censors—H. J. Meyer, P. S. Windham, and R. S. Jiroch.

WASHTENAW COUNTY

L. J. JOHNSON, M.D.

Secretary

The Washtenaw County Medical Society held its regular dinner and public meeting at the Michigan Union at 6:00 P. M., December 1, 1936, Dr. Norman F. Miller presiding.

Thirty-one members attended the dinner and meeting.

The minutes of the meeting of December 1, 1936, were approved as printed on the program.

The annual report of the Secretary and Treasurer was presented by Dr. LaFever and was approved and filed.

The Nominating Committee listed the following candidates:

President—Dr. Reed Nesbit.
President-elect—Dr. S. L. LaFever.
Secretary-Treasurer—Dr. L. J. Johnson.
Censor to serve for 3 years—Dr. H. B. Britton.

Motion was made by Dr. Teed and seconded by Dr. Ross that nominations be closed and a unanimous ballot be cast for the four candidates recommended by the Nominating Committee. Carried.

Dr. Miller praised the Public Relations Committee for their time-consuming efforts and inferred that the future of this Committee will be very interesting and of great importance to every member of their Society.

Dr. Miller thanked the members for their attendance and cooperation during the year of 1936.

There being no further business the meeting adjourned at 8:30 P. M.

WEXFORD COUNTY

BENTON A. HOLM, M.D.

Secretary

Officers of the Wexford County Medical Society for 1937, are as follows:

President—Dr. Gregory Moore, Cadillac.
First Vice President—Dr. E. A. McManus, Mesick.
Second Vice President—Dr. John Carrow, Marion.
Secretary-Treasurer—Dr. Benton Holm, Cadillac.
Delegate to State Convention—Dr. W. J. Smith, Cadillac.
Alternate—Dr. John Carrow, Marion.

Success Story—He had tried hard several times, but failed. There had always been some excuse—his youth, appearance, financial status. This time he was determined. There would be no more nonsense.

Brusquely he elbowed his way through dozens of applicants, past private desks, directly into the office of the chief executive.

"Now, look here—" he began. He spoke forcefully, brushing aside all protests.

Ten minutes later, smiling scornfully at the waiting mob, he marched out. At last, he was on relief.
—*Literary Digest*.

The mighty engines of the liner throbbed ceaselessly. The chief engineer wiped a perspiring forehead as he scowled at the pale-faced young man with the oil-can.

"Look here," he growled, "you aren't helping me much with these engines. I understood you knew something about the game."

"So I do," stammered the other, "but on a smaller scale, you know."

"What's your usual job?"

"Watch repairing."—*El Paso World-News*.

MICHIGAN'S DEPARTMENT OF HEALTH

C. C. SLEMONS, M.D., Dr.P.H., Commissioner
LANSING, MICHIGAN

SANILAC AND DICKINSON COUNTIES ORGANIZE HEALTH DEPARTMENTS

Dickinson and Sanilac counties voted in December to organize local full time health departments, thus making a total of twelve counties to provide this service during 1936. More than 300,000 additional persons have been provided with this protection during the past year, and 52.5 per cent of the rural population of the state is now being given full time health service.

The Sanilac health unit is unique in that it will be a demonstration project sponsored by the Children's Fund of Michigan with the aid of state and Social Security Act funds. It will be the first of such departments in the Thumb District of Michigan although 51 other counties in the state are now provided with county or district health departments.

* * *

NUTRITIONAL PROGRAM

Dr. Lillian R. Smith, director, Bureau of Child Hygiene and Public Health Nursing, has announced the development of an educational program in nutrition under the direction of Miss Elizabeth Whipple, B.S. Such a program will be integrated with the bureau's general health education program among both adults and children. Miss Whipple is a graduate of Simmons' College, Boston, served in the University Hospital, Ann Arbor, and comes to the Department from her recent position with the Kent County Welfare Relief Commission.

Department nurses will conduct child care classes during January, February, and March in the following counties: Ionia, Miss Doris Wacker; Houghton, Miss Bessie Bridwell; Washtenaw, Miss Grace Myers; Monroe, Miss Laura Kerr; Saginaw, Miss Iva Robertson; Shiawassee, Miss Bertha Cooper; and Cass, Miss Pauline Jones.

Women's classes are being conducted in Oceana county during January and February by Dr. Pearl Toivonen and in Bay county by Dr. Vida Gordon. Dr. Toivonen will conduct similar classes in Kalamazoo county starting March 1. During March Dr. Gordon will lecture before the county normal training classes.

Nurses assigned to Port Huron to conduct a prenatal nursing program include Mrs. Lydia Tracy, Miss Mary Alton, and Miss Sylvia Krejci. Prenatal work will be conducted in Huron county by Miss Julia Clock; Bay county, Miss Bertha Groth; and Genesee, Miss Martha Giltner.

* * *

VENEREAL DISEASE INSTITUTE

Commissioner C. C. Slemons and Dr. C. D. Barrett, director, Bureau of Communicable Diseases, represented the Michigan Department of Health at the national venereal disease institute called by Surgeon General Thomas Parran at Washington, Dec. 28-30. The institute was called for the purpose of bringing to those interested the most recent information regarding the control and clinical management of syphilis and gonorrhea. State and local venereal disease control officers as well as clinicians and medical instructors were in attendance. Out of this institute there is expected to develop the impetus to successfully carry on the Surgeon General's campaign to stamp out syphilis as a public health menace.

BIRTHS AND DEATHS IN 1936

Births in Michigan will show a slight decline for 1936 after the unusual rise of the previous year according to present indications. On Nov. 1 there had been recorded 73,369 births compared with 73,761 on the same date in 1935. The 1936 total is not expected to reach the 87,403 births recorded in 1935. This declining birth rate is typical of that throughout the nation.

Total deaths for the state on the basis of unofficial estimates will increase almost seven per cent over the 1935 figures, the greatest increases being shown in deaths from heart disease, cancer, diabetes, apoplexy and nephritis. Deaths from heart disease increased from 7,934 on Nov. 1, 1935, to 8,597 on the same date in 1936. Almost 300 more persons died of cancer this year than last.

Alarming increases were recorded in deaths from pneumonia and automobile accidents. With an increase of 231 deaths during the first ten months, pneumonia continued on its upward trend of recent years. Automobile deaths were running eight per cent ahead of last year's all-time high toll and the final figure will be well over the 1,667 deaths recorded then. The July heat wave accounted for 956 deaths out of the total increase of 3,129 deaths during the first ten months. On Nov. 1 a total of 45,731 deaths from all causes had been recorded, compared with 42,602 on the same date in 1935.

The health of the state generally in 1936 was excellent, with no disease outbreaks of epidemic proportions. Deaths from the communicable diseases such as typhoid fever, diphtheria, whooping cough and tuberculosis continued on their downward trend.

With cancer deaths up seven per cent over 1935 and responsible for one of every ten deaths, the Michigan Department of Health is bending every effort to aid in the intensive state-wide educational campaign to be conducted during 1937 by the Joint Committee on Public Health Education to prevent many of these deaths.

* * *

DIAGNOSTIC LABORATORIES MOVED

Removal of the diagnostic laboratories of the Michigan Department of Health to new quarters will be completed by Jan. 15, it is announced by Commissioner C. C. Slemons. After that date diagnostic service to physicians will continue without interruption from the recently completed modern laboratory located at the State Biologic Plant three miles northwest of Lansing.

Extensive laboratory facilities available in the new \$175,000 three-story structure will make possible greater efficiency and speed of diagnostic service to the health professions of Michigan. Completion of the new laboratory unit gives this state a biologic and diagnostic laboratory service equal to the best.

IN MEMORIAM

Dr. Frederick B. Burke

Dr. Frederick B. Burke, president-elect of the Wayne County Medical Society, died at Harper Hospital, February 2, 1937, of pneumonia, after a little over a week's illness. Dr. Burke would have been installed as president of the society next May. He was born in Milburn, Kentucky, fifty-five years ago, the son of Dr. Thomas W. and Nellie B. Burke. Dr. Burke's father was a native of Ireland. Coming to this country, he practiced medicine for a number of years in Washington, D. C., where he died in 1915.

Dr. Frederick Burke graduated from the Medical Department of Georgetown University in 1906, after which he served his internship in the Washington General Hospital. He located in Detroit in 1909. In 1908, Dr. Burke was married to Louise A. Miller of Washington, D. C. He is survived by his widow and one daughter, Louise.

Dr. Burke practiced as a pediatrician. He held a high place in the estimation of the medical profession. He was called in to many doctors' homes whenever their children were in need of medical care. He might have been called "the doctor's children's doctor." He was for a number of years prominently identified with medical affairs, being an ardent member of the Wayne County and Michigan State Medical Societies, and the American Medical Association. He was a member also of the Detroit Board of Commerce, and took particular interest in civic affairs. For a number of years, Dr. Burke was a member of the Ethics Committee of the Wayne County Medical Society, and up to the time of his election as president-elect, he was chairman of the Ethics Committee. He was aggressive and fearless in everything which he considered right and which he considered in the best interest of organized medicine. He was a member of the Legislative Committee and also chairman of the Ethics Committee of the Michigan State Medical Society. In Dr. Burke's death, both the Wayne County and the Michigan State Medical Societies have lost a valued member.

Dr. Collins H. Johnston

Dr. Collins H. Johnston, of Grand Rapids, died December 29, 1936, of heart disease. He was born in Detroit seventy-seven years ago. He received his early education at Amhurst, Massachusetts, and at Ann Arbor, where he was graduated B.A., and where in 1883 he received the degree M.D. He practiced for three years at Sutton's Bay, which was followed by a year in postgraduate work in New York. In 1887, he located in Grand Rapids, where he practiced the remainder of his life, excepting when he went to Europe for graduate work. He spent a year in post-graduate work in Berlin, Leipsic, Dresden and Prague. Dr. Johnston was a member of a committee which organized the Michigan Tuberculosis Association. He was the association's president in 1913. He held membership in the American Medical Association, the Michigan State Medical Society, the Kent County Medical Society, the American Clinical and Climatological Society, the American College of Physicians; and for many years he was chief of staff of the Blodgett Home for Children. He was also a member of the staff of the Blodgett Memorial Hospital and was secretary of the state medical society for five years. For twenty years he was chairman of the Kent County Medical Milk Commission and was surgeon for the Grand Trunk and New York Central railroads.

Dr. Charles A. Blair

Dr. Charles A. Blair of Morenci, Michigan, died on August 4, while on a visit to his daughter in California. Dr. Blair was born on January 1, 1859, at Smithville, Ontario. He was graduated from the Detroit College of Medicine in 1894. He was valedictorian of his class. Dr. Blair located at Morenci in 1894, where he had practiced up till the time of his last illness. Besides his wife, he is survived by one daughter, Mrs. Helen Blair Thurlby, and two granddaughters, as well as a sister, Mrs. Lillie M. Fisk of Adrian, and one brother, Frank Blair of Morenci.

General News and Announcements

The 100 per cent Club is now composed of three County Medical Societies:

Muskegon County Medical Society
Newaygo County Medical Society
Ontonagon County Medical Society

Each member of the above County Medical Societies has paid his 1937 dues in his County and State Medical Society. Is your County Society paid up 100 per cent?

Dr. H. F. Becker of Battle Creek has also been made a member of the Committee on Medical Economics of the State Society by President Perry.

Dr. R. H. Denham of Grand Rapids spoke to the Allegan County Medical Society on February 2, 1937, on the subject of "Traumatic Surgery."

Your office at 2020 Olds Tower, Lansing, is maintained for your convenience. If you wish a service performed, write the Executive Secretary.

Dr. Z. L. Kaminski of Detroit left the first part of February for a cruise around South America. Dr. Kaminski will return to Detroit the latter part of March.

Dr. Valorus F. Lang, formerly of Manistique, Michigan, has transferred to the Wisconsin State Medical Society. Dr. Lang is now located at 208 E. Wisconsin Ave., Milwaukee.

Dr. A. F. Bliesmer, St. Joseph, features in a story concerning an ancient document in his wife's possession, a log-book of more than 110 years of age from "Old Ironsides."

Shiawassee County Medical Society will entertain officers of the Michigan State Medical Society at a "State Society Night" to be held in Owosso on February 18, 1937.

Dr. Andrew P. Biddle and **Dr. Chas. S. Kennedy** of Detroit were elected President and Secretary respectively at the annual meeting of the Detroit Library Commission on January 5, 1937.

September 27-28-29-30, 1937, are the dates of the Seventy-Second Annual Convention of the Michigan State Medical Society, in Grand Rapids. Get your hotel reservations now.

Dr. Frank L. S. Reynolds, Secretary of the Gogebic County Medical Society is basking in the famous California sunshine. Dr. Mark S. Knapp of Ann Arbor is enjoying the balmy weather of Florida.

A radio talk entitled, "The Truth About Child-birth Fever" was presented by Dr. Harold A. Furlong of Pontiac over Station CKLW on January 5. Dr. Furlong is a member of the State Society Maternal Health Committee.

Dr. M. C. Hubbard of Vestaburg, Michigan, Detroit College of Medicine, Class of 1906, suffered the misfortune of having his right leg amputated on October 13, 1936, because of tuberculosis of the knee.

Dr. Alexander M. Campbell of Grand Rapids gave a talk on Maternal Health to the Junior Board of Blodgett Hospital on Wednesday, January 13th. He presented the film entitled "The Care of the Expectant Mother."

Dr. Alexander M. Campbell, Grand Rapids, Chairman of the Maternal Health Committee of the Michigan State Medical Society, presented a radio talk over station WOOD on Tuesday January 12. His subject was "Prenatal Care."

Copies of "Who Wants Socialized or State Medicine!" are available to members of the Michigan state Medical Society at no cost. Drop a postal card to 2020 Olds Tower, Lansing. Your patients will be interested in this booklet.

The articles and material in THE JOURNAL OF the MICHIGAN STATE MEDICAL SOCIETY are copyrighted. For permission to use or reprint any of the copy contained herein, write the Editor, Dr. James H. Dempster, 5761 Stanton Avenue, Detroit.

The Northwest Medical Conference for 1937 will be held in the Palmer House in Chicago, February 14. Wm. J. Burns, Executive Secretary of the Michigan State Medical Society, will address the group on "The Economic Education of the Medical Student."

Dr. John O. Wetzel of Lansing is the author of an article entitled "Aneurysm of the Internal Carotid Artery with Atrophy and Compression of the Optic Nerves," which appeared in the December, 1936, issue of the *American Journal of Ophthalmology*.

The Midwest Conference on Occupational Disease will be held at the Hotel Statler in Detroit, on May 3-7, inclusive, in conjunction with the annual meetings of the American Association of Industrial Physicians and Surgeons, and Michigan Association of Industrial Physicians and Surgeons.

Dr. R. G. Tuck of Pontiac has been appointed by President Henry E. Perry as Chairman of the Liaison Committee with Dentists, Nurses and Pharmacists, and also as a member of the Committee on Medical Economics of the Michigan State Medical Society.

Dr. H. H. Hammel, well known big game hunter of Tecumseh, Michigan, showed color motion pictures at the Annual Meeting of the Lenawee County Medical Society which he took while hunting chamois in New Zealand last fall. He also showed pictures of his sojourn through the South Seas.

Dr. W. M. Bartlett, Benton Harbor, President of the Twin City Chapter of the National Aeronautic Association, writes an interesting feature on the progress of aviation and a résumé of this organ-

ization's activities during the past year. Dr. Bartlett is Medical Examiner for the U. S. Bureau of Air Commerce.

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The following officers were elected at the Mercy Hospital, Bay City:

Chief of Staff.....Dr. R. N. Sherman
Vice Chief.....Dr. R. E. Scrafford
Secretary.....Dr. F. H. Drummond
Treasurer.....Dr. O. F. Jens

* * *

Does your County Medical Society wish a talk on Preventive Medicine? Cancer? Mental Hygiene? Dermatology? Maternal Health? Medical Economics?

If so, contact the Michigan State Medical Society, 2020 Olds Tower, Lansing—Tel. 5-3355.

* * *

The roster of members of the Washtenaw County Medical Society was published as of January 1, 1937, and contained the names of all the members. The Washtenaw directory gives the name, address and the telephone number of each member. It is worthy of emulation by all County Medical Societies.

* * *

Dr. Henry Vandenberg of Grand Rapids spoke before the Calhoun County Medical Society on Tuesday, January 5, in the Post Tavern. His subject was "The Cancer Program." A round-table discussion on the aspects of Cancer followed Dr. Vandenberg's lecture, which was illustrated with lantern slides.

* * *

A tribute to a physician's horse, who faithfully served Dr. W. L. Wilson, veteran roentgenologist of St. Joseph, for a period of thirty years and a colorful history of Midland, Michigan, written by this favorite old-time physician whose hair has long since turned white, appeared in the New Year's edition of the *News-Palladium*, Benton Harbor's 140-page newspaper. Dr. Wilson's annual contribution is widely read and anticipated each year.

* * *

"Diseases of the Chest and Upper Respiratory Tract" will be discussed at the Second Annual Session of the Postgraduate Institute of the Philadelphia County Medical Society, April 12 to 16, 1937, in Philadelphia. Members of all County Medical Societies are cordially invited to attend. Further information will be furnished by the Executive Office of the Philadelphia County Medical Society, 21st and Spruce Streets, Philadelphia, Pennsylvania.

* * *

Advertising sales in your Journal for 1936 jumped from \$8,051.31 to \$10,048.55, an increase of approximately \$2,000.00. Result: A better JOURNAL for your desk. We thank you for mentioning advertising in THE JOURNAL to the detail men who visit your office. With your continued help, the advertising in THE JOURNAL will be increased another \$2,000.00 in 1937. A better JOURNAL will be ready for your perusal every month.

* * *

A few more of your friends who entered technical exhibits at the Detroit Convention of the State Society, held in September, 1936, included:

Libby, McNeill & Libby, Chicago
The M. & R. Dietetic Laboratories, Inc., Columbus
Mead Johnson & Company, Evansville
The Medical Bureau of Chicago, Chicago
Medical Case History Bureau, New York
The Medical Protective Company, Wheaton, Ill.
The Mennen Company, Newark
Merck & Company, Inc., Rahway, N. J.
Michigan Bandage Company, Detroit
Middlewest Instrument Company, Chicago

Committeemen in Smashes!

On December 6, the automobile of Dr. L. E. Holly of Muskegon turned over on an icy pavement when he was on his way to Lansing for the Legislative Conference. On the same day, Dr. Wm. S. Reveno of Detroit had a smash-up on his way to a meeting of the Public Relations Committee. On January 8, Dr. Dean Hart of St. Johns had a head-on collision while on his way to Detroit to attend a meeting of the Liaison Committee with the Michigan Hospital Association.

* * *

Dr. Harrison S. Collisi was named Chief of Staff of Butterworth Hospital, Grand Rapids, for 1937. Other officers are Dr. Leland M. McKinlay, Vice Chief of Staff; Dr. G. Howard Southwick, Chief of Surgery; Dr. Waldemar B. Mitchell, Vice Chief of Surgery; Dr. J. Clinton Foshee, Chief of Gynecology; Dr. James S. Brotherhood, Chief of Medicine; Dr. Leon C. Bosch, Chief of Obstetrics; Dr. Lorenz J. Schermerhorn, Chief of Pediatrics; Dr. Henry M. Blackburn, Chief of Eye, Ear, Nose and Throat.

* * *

The Centennial of the University of Louisville Medical School

The University of Louisville Medical School is the second oldest medical school now in existence west of the Alleghenys and the oldest municipal medical college in the United States. It celebrates its Centennial March 31 to April 3, 1937, at Louisville, Kentucky. There is an unexcelled clinical program by outstanding guest speakers. Ward rounds daily at the Hospital and lectures in the forenoon and afternoon. There will be numerous scientific exhibits in the various departments of the University.

* * *

SERA Letter No. 274 provides for the payment of mileage at the rate of 25c per mile both ways, after the first three miles, to physicians in the Upper Peninsula as well as to physicians in Alpena, Antrim, Charlevoix, Cheboygan, Emmet, Montmorency, Otsego, Presque Isle, Alcona, Arenac, Benzie, Clare, Crawford, Gladwin, Grand Traverse, Iosco, Kalkaska, Lake Leelanau, Manistee, Mason, Missaukee, Ogemaw, Osceola, Oscoda, Roscommon, Wexford, Oceana, Newaygo, and Mecosta Counties. The above applies to physicians located in the counties listed who render medical service to patients on relief rolls during the months of January, February, March and April.

* * *

Crippled and Afflicted Child Commitments for December, 1936:

Crippled Child: Total of 139.

Of the total number 48 went to University Hospital and 91 went to miscellaneous local hospitals.

From Wayne County (included in above totals): Total cases 50.

Of the 50 cases in Wayne County, 3 went to University Hospital and 47 to miscellaneous local hospitals.

Afflicted Child: Total of 948 cases.

Of the total number 206 went to University Hospital and 742 to miscellaneous local hospitals.

From Wayne County (included in above totals):

Total of 302 cases, of which 33 went to University Hospital and 269 to miscellaneous local hospitals.

* * *

Conference on Occupational Disease in Detroit—The first week in May the Wayne County Medical Society will join with the Michigan State Medical Society, Detroit Department of Health, Michigan Department of Health, Engineering Society of Detroit, and other interested organizations in promoting

ing the Mid-West Conference on Occupational Diseases. All phases of this rapidly developing medico-industrial and medico-legal subject will be discussed. On the Thursday immediately following the conference, joint Annual Meetings of the American Association of Industrial Physicians and Surgeons and the Michigan Association of Industrial Physicians and Surgeons will convene for a two-day session, the program of which will be complementary to the Occupational Disease Conference program. The American Association of Industrial Physicians and Surgeons was organized in Detroit in 1916. It is particularly appropriate that it meet again in Detroit at a time when occupational disease legislation is prominently before the medical profession. All meetings will be held in the Statler Hotel, May 3-7, 1937, inclusive.

* * *

Dr. A. D. MacLaren Honored

The St. Clair County and the Michigan State Medical Society paid tribute to Dr. A. D. MacLaren of Port Huron at a dinner on January 5. The oldest practicing physician in this state, both in age and years of practice, Dr. MacLaren has for more than six decades rendered his services. He was born in 1849 in Halton County, Ontario, and attended the Ralph School of Medicine in Toronto, later completing his training in the Long Island College Hospital, Brooklyn, New York, and the New York Eye and Ear Hospital. Dr. MacLaren served as police commissioner of Port Huron, and for six years was the health officer of the city. He has a deep interest in religious and Y.M.C.A. work.

Honoring Dr. MacLaren at the dinner were Dr. Henry Cook of Flint, president-elect of the Michigan State Medical Society; Dr. A. B. Armsbury and Dr. T. E. DeGurse of Marine City; and Dr. Alex J. MacKenzie, Dr. T. E. Heavenrich, Dr. E. W. Meredith, Dr. George Waters and Probate Judge Clair R. Black, all of Port Huron. Dr. Howard O. Brush, president of the St. Clair County Medical Society, was toastmaster.

* * *

Michigan doctors played an important part in the fifth annual convention of the American Academy of Orthopedic Surgeons in Cleveland, January 11 through 14.

Dr. Carl Egbert Badgley, Professor of Orthopedic Surgery at the University of Michigan, was elected Secretary of the Academy for the ensuing year.

Papers were presented by Doctors Charles W. Peabody, C. Leslie Mitchell and Frederick C. Kidner of Detroit and by Professor Howard B. Lewis of the University of Michigan Department of Biological Chemistry.

Other Michigan physicians in attendance were Drs. W. E. Blodgett, Frank E. Curtis, F. J. Fischer, A. G. Goetz, D. W. Hedrick, H. A. Jarre, A. D. LaFerte, F. H. Purcell, Daniel M. Stiefel and Adolph Schmier of Detroit; C. W. Brainard, Battle Creek; E. R. Elzinga, Marquette; R. J. Fortner, Three Rivers; V. S. Laurin, Muskegon; Felipe Muro, Farmington; T. E. Schmidt, Jackson; and C. H. Snyder, Grand Rapids.

Doctors Schmier and Stiefel were among those doctors admitted to Fellowship in the Academy at the annual banquet in the Hotel Cleveland.

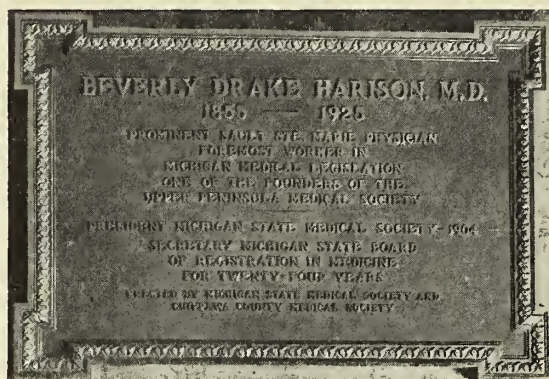
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Medical and public health activities under Social Security in Michigan include:

1. General Health Program (aid to county health units, etc.) Administered by the Michigan Department of Health under the United States Public Health Service—\$280,293 per annum.

2. Maternal and Child Health Program (including refresher courses to physicians having patients in rural areas.) Administered by the Michigan Department of Health under the Children's Bureau of the U. S. Department of Labor—\$114,901.51 per annum.
3. Crippled Children. Administered by the Crippled Children Commission under the Children's Bureau of the U. S. Department of Labor—\$100,000 per annum.
4. Aid to the Blind (including incidental examination by ophthalmologists), administered by the Welfare Department under the U. S. Bureau of Public Assistance—\$64,000 per annum.
5. Child Welfare Service (including incidental examinations by psychiatrists), administered by the Children's Institute at Ann Arbor under the Children's Bureau, U. S. Department of Labor. This is mainly preventive work in rural counties, and includes a traveling unit.

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For circumstances incidental to the placing in position of the tablet, of which this is a photograph, see the January JOURNAL, page 76.

* * *

The Jackson County Medical Society celebrated its second "State Society Night" on Tuesday, January 19, 1937. The series of "State Society Night" was inaugurated by the Jackson County Medical Society on January 21, 1936. Officers and committeemen of the State Society together with members of the Hillsdale County Medical Society and the Jackson County Medical Society enjoyed a very delightful cocktail hour at the Hayes Hotel. Following the dinner, the meeting was opened by Dr. E. D. Crowley, President of the Jackson County Society, who welcomed the guests and turned the meeting over to Dr. Phil Riley, Chairman of the Program Committee. In order that the group might be better acquainted, each one arose to his feet giving his name and home city.

The first speaker to be called upon was Dr. J. Earl McIntyre of Lansing, Councilor of the Second District. Dr. McIntyre remarked briefly concerning the need for a Basic Science Law in Michigan. Dr. Riley then called upon Dr. Frank E. Reeder, of Flint, Speaker of the House of Delegates, for a story, which was forthcoming amid howls of laughter.

President Henry E. Perry of Newberry outlined the legislative problems of the State Society and asked the coöperation of each and every member of the county society to work. If we all work, we will win.

Dr. L. G. Christian, of Lansing, Chairman of the

Legislative Committee of the State Society, spoke of the hard work of the Legislative Committee and reiterated the need for work and wholehearted cooperation from the men back home.

Chairman of The Council, Dr. P. R. Urmston of Bay City, gave an outline of the work of The Council. Others who spoke briefly were Dr. T. K. Gruber, Eloise, President of the Wayne County Medical Society; Dr. Henry Cook, President-Elect of the State Society; and Bill Burns, Executive Secretary of the State Society.

A highlight of the evening was the presentation of a beautiful scroll appropriately drawn up petitioning the House of Delegates of the State Society to make Dr. D. W. Fenton an honorary Member. Dr. Fenton who resides in Reading, Michigan, is in his 89th year and has practiced medicine for 61 years. He has held many positions of trust in his community and in the Hillsdale County Medical Society. The Jackson County Medical Society also presented a handsome dressing gown. Due to illness Dr. Fenton was unable to be present, and the presentation was made to Dr. B. F. Green of Hillsdale to deliver to Dr. Fenton.

Among those present from out of town who were not called upon for remarks were Drs. R. H. Pino, A. S. Brunk, F. B. Burke, of Detroit; I. W. Greene, Owosso; J. B. Bradley, Eaton Rapids; W. E. Barstow, St. Louis; D. W. Hart, St. Johns; A. G. Sheets, Eaton Rapids; Roy H. Holmes, Muskegon. Also present from Hillsdale County were Drs. O. G. McFarland, North Adams; B. F. Green, A. W. Strom, H. F. Mattson, Chas. T. Bowers, M. H. Bowers, of Hillsdale; W. E. Alleger, Pittsford, President of the Hillsdale County Medical Society; J. S. Stirling, Jerome; L. W. Day, Jonesville. Among those present from Jackson County were Drs. C. D. Munro, G. H. Glover, H. A. Brown, J. B. Meads, G. R. Bullen, R. H. Alter, E. A. Thayer, W. H. Lake, H. M. Chabut, J. W. Wholihan, Ferd. Cox, G. C. Hicks, T. E. Schmidt, W. H. Enders, L. B. Lawton, D. F. Kudner, J. E. Ludwick, W. E. Spicer, A. J. Roberts, H. W. Porter, J. C. Smith, D. P. Philips, J. C. Kugler, H. L. Hurley, J. J. O'Meara, J. D. Van Schoick, Frank Van Schoick, F. F. Pray, J. H. Ahronheim, L. L. Stewart, G. C. Hardie, E. H. Corley, C. Corley, W. A. Wickham, G. A. Seybold, Harry Greenbaum, G. D. Culver, C. R. Dengler, G. M. Baker, P. R. Hungerford, C. E. DeMay, M. D. Wilson, E. S. Peterson, C. F. Hanft, R. E. Newton, M. N. Stewart, W. A. Cochrane, H. F. Balconi, R. M. Cooley, W. L. Foust, M. N. McLaughlin, R. J. Hanna, W. W. Lathrop.

NORTHWEST MEDICAL CONFERENCE

Palmer House
Chicago, Illinois

Sunday, February 14, 1937

8:00 a.m.—BREAKFAST—8:00 a.m.

Informal Discussion. Questions to be written and handed in—assigned to individuals for discussion.

Election of Nominating Committee

Morning Program

9:30 a.m.

President W. F. Braasch, M.D., Rochester, Minnesota, presiding.

Postgraduate and Economic Education

Symposium on Postgraduate Education:

9:30—Report of Survey—R. L. Sensenich, M.D., South Bend, Ind.

9:50—University Courses—Harold S. Diehl, M.D., Dean, University of Minnesota Medical School, Minneapolis, Minnesota.

10:00—Refresher Courses—M. H. Rees, M.D., Dean, University of Colorado School of Medicine, Denver, Colo.

10:10—Formal Local Courses—S. D. Maidon, M.D., Council Bluffs, Iowa.

10:20—Interstate Postgraduate Courses—Jas. D. McCarthy, M.D., Omaha, Nebraska.

10:30—Clinic Courses—Herman H. Riecker, M.D., Ann Arbor, University of Michigan.

10:40—Discussion led by—Ralph R. Wilson, M.D., Kansas City; M. C. Smith, Executive Secretary, Nebraska State Medical Society, Curtis, Nebraska.

Symposium on Medical Economics:

10:55—Economic Education—E. J. Carey, M.D., Dean, Marquette University School of Medicine, Milwaukee, Wisc.

11:15—Economic Education of the Medical Student—Wm. J. Burns, Executive Secretary, Michigan State Medical Society, Lansing, Michigan.

11:25—Economic Education of the Doctor—E. S. Hamilton, M.D., Kankakee, Illinois.

11:35—Discussion led by—C. F. Kemper, M.D., Denver, Colorado; T. F. Thornton, M.D., Waterloo, Iowa.

11:50—Greetings from the American Medical Association—Olin West, M.D., Secretary, Chicago.

12:05—Hospital and Health Insurance—James L. Smith, M.D., Peoria, Illinois.

12:20—Discussion led by—John R. Neal, M.D., Springfield, Illinois; Carl F. Vohs, M.D., St. Louis, Missouri; T. A. Hendricks, Executive Secretary, Indiana State Medical Society, Indianapolis.

Luncheon

12:30 noon

Guests of the Iowa State Medical Society
Remarks by President W. F. Braasch
Election of Officers for 1938.

Afternoon Program

2:00 p.m.

Symposium on Social Security Activities:

2:00—Survey of Activities of State Governments and State Medical Societies—Chas. S. Nelson, Executive Secretary, Ohio State Medical Society, Columbus, Ohio.

2:30—Maternal and Child Welfare—Alfred W. Adson, M.D., Mayo Clinic, Rochester, Minnesota.

2:45—Public Health Services (Resettlement Administration)—A. D. McCannel, M.D., Minot, North Dakota.

3:00—Discussion led by—S. E. Gavin, Fond du Lac, Wisconsin; Elmer G. Balsam, M.D., Billings, Montana.

3:30—Venereal Disease Program—Arthur D. Gray, M.D., Topeka, Kansas.

3:45—Discussion led by—Paul A. O'Leary, M.D., Rochester, Minn.; Earl Whedon, M.D., Sheridan, Wyoming.

4:00—State Boards of Health—Frank Jirka, M.D., Director of Public Health, Springfield, Illinois.

4:15—Discussion led by—Philip Kreuscher, M.D., Chicago, Illinois; J. F. D. Cook, M.D., Langford, South Dakota.

OF GENERAL MEDICAL AND SURGICAL INTEREST

Physiologic Effects of Correction Of Faulty Posture

Louis B. Laplace and Jesse T. Nicholson, Philadelphia (*Journal A. M. A.*, Sept. 26, 1936), state that twenty-six subjects having postural defects of the kypholordotic type were studied with respect to the physiologic changes produced by the correction of their faulty posture. The immediate effects were in general entirely comparable to those observed after one year of corrective exercises. In the corrected posture the diaphragm was not always relatively elevated as is generally believed, nor was the heart always more transversely placed. The diaphragmatic excursions were either increased or decreased, for reasons that are discussed. The vital capacity was generally increased, although flexibility of posture was requisite for optimum results. Oxygen consumption was variable. Pulmonary ventilation was generally increased. Circulatory efficiency, as judged by constancy of blood pressure and pulse rate, was generally improved; in two cases the correction of posture was able to prevent hypostatic congestion and syncope. It was concluded that the results of correcting faulty posture differ widely between individuals, irrespective of the grade of the defect. A correct posture appears to be an appreciable advantage to circulatory and respiratory function in the majority of persons, but in some a postural defect may be a compensatory mechanism which it is inadvisable to disturb. The therapeutic application of postural correction should be made according to the requirements of the individual case and only after an attempt to determine in what posture the individual is functionally most efficient.

Intravenous and Retrograde Urography

In an attempt to compile an up-to-date estimate of the value of intravenous urography, making comparisons with the well established method of cystoscopic (retrograde) urography and treating the subject from the standpoint of the roentgenologist, the urologist and the pathologist, R. E. Cumming and G. E. Chittenden, Detroit (*Journal A. M. A.*, Feb. 22, 1936), prepared a questionnaire, which was mailed to more than 350 active physicians. An accurate summing up of the personal opinions of a great many outstanding men is presented in tabulated form. While the majority of these are urologists, a considerable list of roentgenologists appears in the file of answered questionnaires, and a survey of the opinions of a number of pathologists made as a separate investigation has furnished the background for conclusions representative of the three groups mentioned. The inaccuracies current in the practice of retrograde urography are well known, especially to experienced clinicians who are best able, on the other hand, to interpret the many variations in roentgenograms obtained by the intravenous method. Some roentgenologists seem willing to attempt a complete diagnosis of disorders of the urinary tract without the counsel of a clinician. With the two methods of urography in constant and indiscriminate use, it is more than ever necessary to establish a proper alliance between roentgenologists and clinical

urologists. The correct balance allows primary choice of either method with a willingness to seek confirmation by means of the other. Many individual problems can be solved by one method; in some situations only one can be used. Taking advantage of both and adding the regular practice of multiple or serial exposures at carefully chosen intervals, one may obtain maximal information. Well known dangers of retrograde urography, which formerly were ignored or accepted as unavoidable, are now largely eliminated, so that justifiable fears as to potential renal damage and extension of infection no longer exist. The authors have found no evidence of alarm or of serious consequences verified by pathologists, in connection with the use of the various mediums now employed. Elements of danger present in intravenous urography, which still cannot be ignored, appear in the tables and bear close scrutiny. The variety of answers that the questionnaire has evoked makes one waver between the adoption of intravenous urography to the exclusion of the retrograde method and a wholesale condemnation of the intravenous method and regular use of retrograde urography. This great divergence in opinion show a need for more uniformity in technic with regard to both methods, and a more consistent pooling of information on an unbiased level.

The Relation of Anemia to Pregnancy and Menstruation

The incidence of anemia among normal women of the poor classes in Aberdeen with reference to its relationship to pregnancy and menstruation is reported by Fullerton (*British Med. J.*, Sept. 12, 1936).

The hemoglobin values of 1,534 women were included in the study. When charted by age groups, the non-pregnant women between 15 and 19, at the start of reproductive life, showed an average hemoglobin value of 83% (11.5 g.), 15% below the Price-Jones average for normal women. In the older groups the hemoglobin level progressively decreased reaching the low of 77% (10.6 g.), 21% below normal at age 40 to 44. After the menopause the hemoglobin rose, since the demands for iron were materially decreased.

The values for pregnant women paralleled those for non-pregnant women, but were approximately 5% lower. Although the incidence of anemia in non-pregnant women was less than in pregnant women, the number of severe cases, hemoglobin below 50% (6.9 g.), was greater. Blood examinations and therapeutic iron administration showed that the anemia was clearly attributable to iron-deficiency caused by the low iron content of the diet. Thus both pregnant and non-pregnant women were in negative iron balance throughout reproductive life.

A careful investigation into the total iron demands made in pregnancy by the fetus and tissues, by blood loss at parturition and by lactation showed that in many cases pregnancy did not constitute as great an iron demand as did menstruation. Thus normal menstrual blood loss often produces iron-deficiency, and even in the better classes, profuse menstrual blood loss may lead to hypochromic anemia.

It is concluded that anemia has a high incidence among the poor classes of women caused by a combination of poor diet and iron loss during reproductive life. Menstruation apparently constitutes an iron loss at least as great as pregnancy, and diet is often inadequate to meet the iron demands of either.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

DISEASES OF INFANCY AND CHILDHOOD. By Wilfrid Sheldon, M.D. (Lond.), F.R.C.P. (Lond.), Physician for Diseases of Children, King's College Hospital; Physician to Outpatients, The Hospital for Sick Children, Great Ormond Street; Consulting Pediatrician to the London County Council; with a foreword by G. F. Still, M.A., M.D., LL.D., F.R.C.P., Emeritus Professor of Children's Diseases, King's College, London. With 137 illustrations. Philadelphia: P. Blakiston's Son & Co., Inc., 1012 Walnut Street, 1936.

This is a text book that covers the subject with a sufficient degree of completeness for the student or the practitioner. The discussions are not too deeply involved with detail, yet, it would appear that nothing of importance had been omitted. The illustrations, while they are not profuse, are good and are advantageously placed, so as to illustrate a point needing illustration.

THE 1936 YEAR BOOK OF GENERAL SURGERY. Edited by Everts A. Graham, A.B., M.D., Professor of Surgery, Washington University School of Medicine; Surgeon-in-Chief of the Barnes Hospital and of the Children's Hospital, St. Louis. The Year Book Publishers, Inc., 304 South Dearborn Street, Chicago. 831 pages, price \$3.00.

This work of over eight hundred pages reviews the literature of the entire field of general surgery for the past year. It would take a lengthy review to do more than enumerate the various subjects discussed. The author has covered the surgical literature very thoroughly. Dr. Graham's standing as a surgeon gives the work especial value to surgeons. The work is well illustrated, an important feature in itself, in a book of this kind. It is strongly commended, not only to surgeons, but to the internist who wishes to keep up with the fast developing science of general surgery.

THE 1936 YEAR BOOK OF GENERAL MEDICINE. Edited by George F. Kick, M.D.; Lawrason Brown, M.D.; George R. Minot, M.D., S.D., F.R.C.P. (Hon.) Edin.; William B. Castle, M.D., A.M., M.D. (Hon.) Utrecht; William D. Stroud, M.D., and George B. Eusterman, M.D. The Year Book Publishers, Inc., 304 South Dearborn Street, Chicago. Pages, 848; price, \$3.00.

A commendable feature of the Year Books bearing the imprint of the Year Book Publishers, Inc., is the high standing of the various authors and collaborators. The roster of authorship of the present volume is a guarantee as to the quality and thoroughness of its contents. Such works call for discerning judgment in evaluation of the current medical magazine literature. Since so much of it is of an ephemeral character, once the selection is made, the art of sifting and condensing it into readable form calls for almost equal judgment. These books cannot be commended too highly to the entire profession inasmuch as the regional specialist even should be interested in the entire perspective of medicine and surgery.

SYNOPSIS OF ANO-RECTAL DISEASES. By Louis J. Hirschman, M.D., F.A.C.S. One hundred seventy-four text illustrations and six colored plates; pages, 288. St. Louis: The C. V. Mosby Company, 1937.

This book is more than a "synopsis" as its modest title suggests; it is a monograph, the viewpoint of a single author who makes himself clear not only in

the inimitable diction by which Dr. Hirschman is so well known as a writer and a speaker, but by illustrations as well. We know of no other book of this size in which illustrations are used so profusely and with such telling effect. A first class picture is worth a thousand words of description. The "Synopsis" is an entirely new work and not a revision of the author's well known Handbook of Diseases of the Rectum, which has gone through four editions since its first appearance in 1909.

Dr. Hirschman reviews the anatomy of the distal portion of the colon, the rectum and the anus, then proceeds to the clinical and surgical aspects of his subject. We have a detailed enumeration and description of the symptoms of ano-rectal diseases, then an interesting chapter on methods of examination of the patient. There are two chapters on anesthesia in which are given full details regarding its technic, with a full account of the limitation of its use. In the first of these chapters, the author describes in detail the method of caudal anesthesia. Then there are chapters on fecal impaction, pruritis ani, anal fissure and ulcer, abscess of the ano-rectal polyposis, proctitis and sigmoiditis, acute and chronic; removal of foreign bodies, benign growths, and anal and rectal prolapse. As mentioned, this work is characteristic of Dr. Hirschman's lecture style, clear, concise, colloquial almost in its presentation. To the numerous medical students, erstwhile medical students, the physicians who have availed themselves of the opportunities for post-graduate courses under Dr. Hirschman, this little monograph is earnestly recommended.

TISSUE IMMUNITY. By R. L. Kahn, M.S., D.Sc. Springfield, Ill.: Charles C. Thomas, 1936.

A long series of original experiments on the various phases of tissue reactions are reported in this text. Each chapter consists of an introductory outline, the experiments bearing on a particular phase of immunity, a summary, a discussion of the clinical significance, and the detailed report of each experiment in table form. The various chapters, eighteen in number, deal with tissues in the non-immune state, the period of incubation, the immune state, the "dis-immune" state, natural and passive immunity, immunity in the young, the specific tissue reaction and antigen and antibodies, etc. The last two chapters deal with the theoretical and practical aspects of tissue immunity. This work on tissue immunity grew out of the author's partially successful attempt to obtain a diagnostic precipitation test for tuberculosis. The problem of tissue reaction in tuberculosis led to other experiments with various proteins and bacteria. Horse serum diptheria antitoxin was used to measure the rate of diffusion of horse serum from the different tissues during the various phases of immunity. The author states, in the chapter on tissue necrosis occurring in preexisting inflammatory foci, that inflammation is the defense on the part of the host against invading organisms, while necrosis is the blocking of this defense mechanism by the attacking organism. "Natural" immunity is absent in young animals and is present in adults, as is shown by the failure of the young animal to "anchor" injected streptococci and give a local inflammatory reaction as the adult is able to do. Of all the tissues the skin has the greatest power of "anchoring" antigen or of preventing the spread of bacteria by local inflammation after immunization. In the final chapter on the "Practical aspects of tissue immunity" the relation of the enumerated experiments to various diseases producing tissue immunity is discussed and the need for further investigation stressed. The book closes with a bibliography of forty-five titles and a complete index.

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THE LARYNGOLOGICAL CAUSES OF THE GREAT WAR*

LOGAN CLENDENING, M.D.†

KANSAS CITY, MISSOURI

From the years 1858 to 1887 there were no two European countries between which there existed more cordial feelings of amity than between Great Britain and that group of kingdoms which in 1871 combined to form the German Empire. These feelings were based partly upon the fact that the reigning houses of Great Britain and a number of these states were closely linked by ties of blood; partly because there was no apparent conflict in the national destinies of the two groups, and partly because of a real admiration and sympathy which the two peoples had for each other.

England and Prussia had fought shoulder to shoulder to destroy the menace of Napoleon, who had given the British Empire the greatest fright of its career, and such a memory was not easily forgotten. France had continued to be England's national rival and in the Franco-Prussian war English sympathies were very markedly pro-Prussian. When Russia's power began to threaten the peaceful continuity of British rule in India, it was a comfort for John Bull at his fireside to know that a military power of growing importance was prepared at any moment to take advantage of Russia's diversions on the southern front.

Even deeper than these considerations was the fellow feeling between the two peoples. Germans and Englishmen were industrious; they were sound artisans; they were interested in manufacture; there was no damn foppery about Germans and there was

no double meaning about an Englishman's proposals.

And then, all of a sudden, there occurred an event, tragic in itself—certainly, I believe, inevitable—the management of which was so bungled and so grossly mishandled that between the two peoples and between their rulers there spread a rift which has not yet been bridged.

I am fully aware that the causes of war are very complicated and probably economic in their basis, but just as in those quarrels that arise between individuals, those life-long animosities which separate two honest and kindly human beings, there is likely to be some little, illogical incident which sets the thing off. So with nations. Some equally trivial incident may sharpen the perceptions as to those differences and ultimately lead to war. The incident to which I refer certainly turned the thoughts of English people towards an entirely different international alliance so that the final set-up was England, France and Russia against the Central Powers.

On the 18th of October, 1831, a son was born to the brother of the King of Prussia.

*Read before the Wayne County Medical Society January 4, 1937.

†Dr. Logan Clendening was graduated from the University of Kansas Medical School in 1907. He is professor of medicine in the University of Kansas Medical School. Dr. Clendening possesses unusual ability as a medical writer. He has written a number of books of very excellent quality for lay reading, among them, "The Human Body" and "Behind the Doctor." Dr. Clendening's clarity of style as well as his wide knowledge of his subjects would justify the reading of his works by all members of the medical profession.

As the King, William IV, had no issue, this child had every prospect of inheriting the crown. The son was christened Frederick William. On November 21, 1840, the first child was born to Queen Victoria of England and her German consort, Prince Albert of Saxe-Coburg. The sex was disappointingly female, and the little girl was named Victoria Adelaide Mary Louisa.

When Prince Frederick William of Prussia was twenty and the Princess Victoria was eleven years old, they first met. According to court biographers it was a case of love at first sight on both sides. This is a little difficult to believe in the case of an eleven-year old girl or in the case of a young man of twenty and an eleven-year old girl, unless the Princess was entirely different from any eleven-year old girl that I ever saw. But, at any rate, the marriage was arranged and seven years later, on January 25, 1858, they were married in the Chapel Royal at St. James Palace.

Almost a year to a day after the marriage there was born to the couple a son and heir, who was named Frederick William Victor Albert, partly after his German father, partly after his English grandmother, and partly after his German-English grandfather. The labor was difficult apparently and both child and mother were in some danger for several days. The boy had a brachial paralysis of the left arm, the shoulder socket was injured and throughout his life the arm was deformed and shriveled.

Naturally with so pleasant and close a domestic relationship set up between the two reigning families, with the prospect of brother and sister sitting respectively on the thrones of England and of Prussia, the two countries were influenced to be very friendly towards each other.

In that year of 1859 another event occurred, obscure and unnoticed at the time, but fraught with deep significance to the future of the young couple. A French singing master had a vision. His name was Emanuel Garcia and he avers that while walking in the Tuileries and thinking upon his fondest desire, which was to see the human vocal cords in action, he saw the answer to his prayers in the clouds in the form of a small mirror attached to the end of a long slender handle. He purchased an in-

strument of this kind in a dental supply store and actually saw his own vocal cords.

During the Franco-Prussian War, Prince Frederick behaved with great gallantry. He was in command of the Third Army, made up mostly of Bavarian troops and personally commanded at the Battle of Weisenburg, which was of great strategic importance because it dashed the hopes of the French army to effect an invasion of the south.

He came out of the war idolized by the German people and with every expectation of a happy and prosperous reign. Personally he was conscientious, courageous, courteous to a degree, and so fair minded that it was said that he intended to return Schleswig-Holstein to Denmark and Alsace-Lorraine to France as soon as he ascended to the throne.

In January, 1887, when the Crown Prince was fifty-six years old, he apparently caught cold and after his convalescence he was left with a hoarseness, which at first caused no concern. The Prince's only attention to it was to say with deprecating smile, "I cannot sing any more." And on one public occasion when he was required to make a speech the hoarseness was so noticeable that he was persuaded to desist.

On March 6, 1877, the throat was examined by Dr. Gerhardt, Professor of Surgery at the University of Berlin. He found a small growth on the left vocal cord and proposed to remove it surgically. He attempted to do this, failed, and burnt it down with a cautery. This operation seemed to do some good. The Prince went to Ems and returned feeling somewhat better.

In the latter part of April, however, the trouble recurred. Professor Ernst von Bergmann was called in consultation. On the 17th of May the Crown Princess wrote to Queen Victoria:

"My heart is very heavy since this morning as I find that the doctors now discover that the lump in Fritz' larynx is not a simple granulation but is most likely a thing called 'epithelion' and that if it is to be removed it cannot be got at from inside the throat as it may also exist under the larynx in the fold. The celebrated surgeon, Professor von Bergmann, is for operating from the outside and you can imagine that this is not an easy operation or a small one. Of course, Fritz is as yet not to know a word about this."

At a consultation the next day several physicians considered that a cancer of the

larynx was present and proposed a laryngectomy by von Bergmann should be performed. When the Chancellor Bismarck read this report and understood the gravity of the situation he determined that the best expert in Europe should at once be summoned. Bismarck was strongly opposed to the Crown Prince in politics and did not like the Crown Princess but he felt that all differences of opinion should be submerged and, accordingly, in spite of the fact that several specialists, one of whom was an Austrian, were suggested, he acceded to the wishes of the English Princess and they decided to call Dr. Morell Mackenzie of London in consultation.

Mackenzie was a man of acknowledged eminence in laryngology.

Dr. Mackenzie arrived in Berlin on May 20, 1887. He was received immediately by the Crown Prince, who apologized for the trouble which his throat was causing other people. He spoke in English with scarcely a trace of foreign accent but his voice was little better than a gruff whisper. His Imperial Highness offered to submit himself to examination there and then but Dr. Mackenzie ventured to suggest that it would be better that he should first confer with the doctors already in attendance.

He was conducted to another room where he found the following consultants assembled: Professor Gerhardt, Professor von Bergmann and Professor Tobold, Dr. von Lauer, Medical Director-General in the German Army, Dr. Wegner and Dr. Schrader. Dr. Mackenzie says he was surprised to find that although he could name three or four men in Germany whose reputation in laryngology was not confined to their own country, not one of them was present at this time or had been asked to examine his Imperial Highness.

Dr. Wegner read Dr. Mackenzie a report of the case, which was substantially as I have outlined it above. The Crown Prince himself attributed his illness to a severe cold which he caught in the autumn of 1886. While he was driving one evening in Northern Italy with the King and Queen of Italy and the Crown Princess, the coachman lost his way; it became very dark and cold and the Crown Prince had no great-coat with him. He felt that his throat had never been quite well since that evening.

After Dr. Wegner had concluded his report, Dr. Gerhardt described the condition of the Prince's throat when he first saw it.

After hearing these statements, Dr. Mackenzie proceeded to examine the case for himself. The royal patient went into a darkened room with the entire group of consultants, and with a laryngoscopic mirror Dr. Mackenzie saw a growth about the size of a split pea at the posterior part of the left vocal cord. He has left a very full description of its appearance, which does not differ materially from that of Gerhardt. After this examination the consultants withdrew for discussion.

It should be said here that the German physicians had already agreed on the diagnosis of cancer on the following grounds:

- "1. The rapid re-growth of the tumor.
- "2. The hardness and unevenness of the growth.
- "3. The continued non-healing of the wound on the inner part of the tumor.
- "4. The defective mobility of the cord.
- "5. The certainty of the non-existence of tuberculosis or other specific disease.
- "6. The existence of a series of additional corroborative circumstances."

At the first consultation Mackenzie flatly rejected the diagnosis of cancer but made the very sensible suggestion that a piece of the growth be removed for pathologic examination. The German physicians did not believe that it was possible for him to do this successfully. He replied that he realized that there were difficulties in the procedure but he believed it could be done. He then turned to Professor Gerhardt and said, "Will you try?" Professor Gerhardt replied, "I cannot operate with forceps." He then asked Professor Tobold, who also declined, saying, "I no longer operate." They all agreed, however, that the attempt should be made and it was arranged that Dr. Mackenzie would make it.

Dr. Mackenzie had been summoned in great haste and arrived in Berlin without any of his own instruments except those required for a simple laryngoscopic examination. He visited a surgical instrument shop in Berlin but was unable to find any of his own laryngeal forceps. He found one, however, of a French pattern which he decided to use.

The tissue removal was accomplished with success. On withdrawing the forceps and opening the blades, Dr. Mackenzie was able to show a fragment of growth in one

of them. He says that a look of amazement, quickly followed by one of annoyance and disappointment, came over the faces of Professors Gerhardt and Tobold; Dr. Wegner, on the other hand, was delighted and warmly congratulated him. After the operation Dr. Gerhardt made an examination and said that he could see the fragment had been taken from the posterior and under part of the growth. Dr. Gerhardt himself says that he saw a slight loss of the substance of the mucous membrane on the upper surface of the left cord near the edge of the tumor. In other words, he says that he does not believe Mackenzie removed the tumor itself.

This fragment was examined by Professor Rudolf Virchow and declared to be non-cancerous. At the same time Virchow said that the affection might be pachydermia laryngis, which is a thickened condition of the larynx resulting from chronic inflammation. If Mackenzie had removed tissue at the edge of the growth it would be natural that Virchow would not find cancer but, as Mackenzie himself says, it is inconceivable that the first pathologist in the world should mistake healthy for diseased tissue and, therefore, he is certain that he removed part of the pathologic tissue.

On May 22 Dr. Mackenzie attempted to remove another piece of tissue. At this time his forceps did not engage and were brought away empty. This, of course, is a common enough event, to which no blame should be attached. The German physicians, however, made much of it. Not only that, but Dr. Gerhardt asked to examine the larynx immediately afterwards, and he had scarcely put the mirror in position when he withdrew it with a highly artistic expression of horror and alarm. When they withdrew to the other room Dr. Gerhardt accused Mackenzie of having injured the right vocal cord (the growth had been on the left cord).

Dr. Gerhardt also said that he noticed Dr. Mackenzie removed the forceps from his pocket and introduced them into the throat without previously cleaning them and that the laryngoscopic reflector fell on the cheek of the illustrious patient instead of in the mouth. Dr. Mackenzie's explanation is that he kept the forceps in his pocket wrapped up in carbolized cotton wool.

Two days later at a general consultation Dr. Gerhardt lowered his voice to a tragic whisper and asked Mackenzie whether he might be permitted to communicate a certain event to the assembled doctors. Mackenzie assented and Gerhardt then proceeded to explain in an artless, pitying sort of way that Mackenzie had injured the right cord. Professor von Bergmann and Professor Tobold both looked at the larynx and agreed that the right vocal cord was injured.

Dr. Mackenzie returned to England and visited Potsdam again on the 7th of June. On examining the Prince's throat he found that the congestion or possible injury which the cords might have received from the previous manipulations, had disappeared.

"I had not proposed to operate till arrangements could be made for some of my colleagues to be present, but finding the occasion particularly favourable, I did not care to let it slip. I accordingly had my forceps brought to me from my room at the top of the palace, and after applying cocaine, succeeded in getting away more than half of the growth."

This specimen was sent to Virchow, who made a microscopical examination and reported on the 9th of June. This report was quite unequivocal, and it must be remembered in Mackenzie's favor that it came from the most famous pathologist in the world at that time and the founder of microscopic pathology.

Virchow said:

"It is proved (i.e., from the examination) that the operation had reached the deep parts, underlying the mucous membrane, yet in spite of the most careful examination of these deeper parts, especially at the cut surfaces, no single portion could be found altered in an appreciable degree. The changes characterize the lesion as an epithelial growth, combined with papillary offshoots, pachydermia verrucosa. In no part could an ingrowth of this epithelial formation into the mucous membrane be detected."

After several consultations with the family and the attending physicians, which are detailed in considerable length by Mackenzie, it was agreed that the Crown Prince should come to London and put himself in Mackenzie's care where, in his own office or hospital, with his own assistants, Mackenzie would have a much better opportunity of removing any part of the growth which might recur.

The situation, so far as the public was concerned, at this point was that the German physicians had made an erroneous

diagnosis and that the English physician, Morell Mackenzie, had saved the Prince from a dangerous and probably futile operation. These reports were published both in English and German newspapers and were naturally very objectionable to the German consultants, none of whom, it must be said to the credit of their diagnostic acumen and to their stubbornness, ever gave up the diagnosis of cancer.

In England the Prince appeared to improve. He rode in the Jubilee procession on June 21 and presented a most striking appearance, at least an appearance which, if we can judge by contemporary description, was that of vigorous health.

On the 28th of June, Mackenzie considered that the growth had been completely removed from the larynx.

Sections presented to Virchow were again reported on July 1, 1887, to be benign.

The Prince left London on September 3 for a winter in the South. Mackenzie says that he warned the Crown Princess of various possibilities—one the return of the tumor even if it was benign, the other the possibility of its becoming malignant.

Mackenzie's assistant, Mr. Mark Hovell, accompanied the party. The party stopped at various places—Toblach, Venice—finally arriving at San Remo on November 3. In the meantime, the observations on the larynx as made by Mr. Hovell and on one or two visits by Mackenzie himself had by no means been encouraging. A growth was seen growing below the left cord and causing considerable edema and perichondritis.

On November 5 Mackenzie was hurriedly summoned to San Remo and on examining the throat the next day he told the Crown Prince that a very unfavorable change had taken place in his throat. His Imperial Highness asked, "Is it cancer?" to which Mackenzie replied, "I am sorry to say, Sir, it looks very much like it, but it is impossible to be certain."

A consultation was now arranged with new consultants, one Professor von Schrötter and the other Dr. Krause of Berlin. It was at this time generally agreed that the disease was malignant. Except for palliative treatments, with the possibility of tracheotomy in the near future, the only treatment suggested was laryngectomy. To

this the Crown Princess objected very strenuously, her idea being that she wanted to preserve her husband's life as long as possible and she greatly feared the outcome of an operation. As I shall intimate below, it is quite possible that the Crown Princess never fully understood the seriousness of the condition.

Professor von Schrötter insisted that the decision should be made by the patient himself and on November 11 it was determined that von Schrötter would outline the possibilities of the case to His Highness in person.

The scene was a very dramatic and a very painful one. Frederick behaved himself in every respect with the most admirable courage. He acted as a king and a soldier should in every particular. He is said to have been the calmest person in the room as von Schrötter went forward with his extremely painful and disagreeable task. Von Schrötter told him that in his opinion laryngectomy offered considerable possibility for cure. He instanced the case of a patient of his who had been operated on some time before and who was still alive. He mentioned the fact that this patient was seventy years old and the Crown Prince said, smiling, "That is good for me. It gives me a better chance because I am only in my fifties."

His Majesty retired to consider the terrible decision with which he was faced. In a few minutes the consultants received a communication from His Imperial Highness, written with a perfectly steady hand, saying that he declined to have his larynx excised but would submit to tracheotomy if it should become necessary. It was then agreed that the operation should, when the time came, be entrusted to Professor von Bergmann unless the emergency was so great that it would have to be done by somebody on the spot.

It is somewhat difficult to understand this decision and the decision of the Crown Princess against radical operation. It is hard to believe that either of them understood the seriousness of the condition. To the physicians, cancer of the larynx meant something in relation to their own clinical background; it meant a rapidly fatal disease. To two people who had never seen

a patient with the disease progress it may have meant something entirely different.

It is notable, Mackenzie said, that Schröter did not use the word "cancer," yet "he made perfectly clear to the Crown Prince that that was what we believed him to be suffering from." The question is, did he? These misunderstandings based upon the difference in the point of view between the physician and the patient are so frequent that there is room for doubt.

But however confused the sick man may have been, however optimistic the doting wife may have considered the outlook, there was one realist who understood what was happening and was making his plans accordingly. No amount of technical discussion from physicians, no amount of reasonable distrust of human decisions in the matter of diagnosis, obscured the truth in the eyes of Otto Prince Bismarck. The old King was declining gradually. Fate had once more intervened to prevent the imperialistic schemes of the Chancellor from falling into the liberal hands of the Prince Frederick and his wife. He immediately began to cultivate, to instruct, to mold, and to form the young man who was later to be William II.

Physicians reading of this case will undoubtedly wonder why no one suggested iodide of potash. As is generally known, a chronic condition of the larynx of this kind is, in the great majority of cases, either a benign growth, or cancer, or tuberculosis, or syphilis. I have heard a rumor that some physician suggested the use of iodide of potash, which would clear up syphilis if it were present, and that he was deported and lived in exile in San Francisco. As a matter of fact, this was proposed by several of the medical consultants at one time or the other and iodide of potash was given at about this time for ten or twelve days without any favorable effect.

The progress of the case can now be summarized quite briefly:

On December 12 the patient expectorated a large slough of gangrenous matter, which was again examined by Virchow without finding any malignancy.

On February 8, the glottis became œdematous and tracheotomy was decided upon. It was urged that von Bergmann be summoned from Berlin to do the tracheotomy

but the condition was so urgent that it was done by a Dr. Bramann. Mackenzie thought that Bramann's canula was too large and it caused considerable irritation.

On February 20, Mackenzie inserted another tube. This situation caused a great deal of irritation between the German and English medical attendants.

On February 22, Kussmaul examined the lungs because von Bergmann thought that there was cancer in the lungs. Kussmaul, however, rejected this idea.

On March 4, a specimen of the growth was removed, which was definitely shown by Waldeyer to be cancerous.

On March 9, Frederick's father, the Emperor William, died and Frederick returned to Berlin, where he became Emperor of Germany although he lived only ninety-eight days.

"The new Emperor was at Villa Zirio at San Remo, when the news was brought of his father's death, and immediately the household of the new monarch gathered in the drawing-room of the Villa. A little later the new Emperor and Empress entered, and the Emperor, moving to a small table, wrote out the announcement of his own accession as Frederick III. His next act was to invest his consort with the ribbon of the Black Eagle, the highest order within his gift. He then greeted Dr. Morell Mackenzie and wrote for him the words: 'I thank you for having made me live long enough to recompense the valiant courage of my wife.' How often must they have talked over what they would do when they ascended the throne, always imagining the splendour of Berlin as the scene!"

Of Mackenzie he asked, "Will there be any danger in my returning at once to Berlin?" Mackenzie replied, "Yes, Sir; there would be some danger." The new Emperor then said, "There are some occasions when it is the duty of a man to run risks, and such an occasion is now before me. I shall return the day after tomorrow."

Mackenzie and Mr. Hovell went with him to Berlin and remained in close attendance.

On March 16, 1888, the funeral of the late Emperor took place. The new Emperor, unable to attend in person, watched the funeral cortège from his palace window.

On April 11, there was some difficulty with the canula and at 5 o'clock in the afternoon von Bergmann came in, in a great state of excitement, removed the canula, cleaned it and tried to put it back. He, however, made a false passage and nearly suffocated the Emperor.

On April 16, a temperature of 103 developed and an abscess was opened at the place where von Bergmann had made the false passage.

On June 7, a fistula broke through between the trachea and the esophagus.

On June 15, Frederick died. Bismarck then asked Mackenzie to make a report on the case and as he was drawing it up he was informed that Bismarck and William had decided to have a post-mortem examination. He regarded this as a plot to trap him into making a statement in the report without knowing that a post-mortem was to be performed. The post-mortem was made by Professor Virchow with the help of Professor Waldeyer, in the presence of Wegner, Bergmann, Bramann, Morell Mackenzie and Mark Hovell. The larynx was found to be almost entirely destroyed, its place being occupied by a large, flat gangrenous ulcer. The mucous membrane immediately below the tracheotomy wound was free from ulceration and scars. A large number of metastases were found in the lungs and several glands.

Hardly was the Emperor's state funeral over than the German consultants published a pamphlet called "*Die Krankheit Kaiser Friedrich des Dritten.*" I regret to say that I cannot give the exact date of the month when this appeared but my copy of the English translation is dated 1888 so it could not have been long after the Kaiser's death. This was an extremely virulent attack upon Mackenzie and accused him of the things which we have already noted: First, that Mackenzie deceived the Emperor as to the nature of his disease; second, that he used forceps without disinfecting them; third, that he could not flash the light on the laryngeal mirror; fourth, that he tore away a healthy piece of vocal cord on the right side (this was on purpose to mislead Virchow); fifth, that Mackenzie was surrounded by press correspondents which enabled him constantly to float his own version of what was going on.

The general populace of Germany took this up and it was reduced to three indictments in the public mind: First, that the German doctors were right about the cancer and Mackenzie was wrong. Second, that the reason Mackenzie denied cancer was present was because of the Hohenzollern

law that no Crown Prince affected with cancer could succeed to the throne, which would have made considerable difference to the English Crown Princess after he died. In other words, the Crown Prince's succession made all the difference between a Crown Princess' state allowance and the income of an Empress Relict. This idea can be very easily refuted. In the first place, the German Empire had only been formed for eighteen years and the Imperial Constitution contains no such condition. In the second place, the diagnosis of cancer was made before the Crown Prince acceded to the throne several months before he died. In spite of this, he did ascend the throne and the Empress received her proper allowance. And, third, a charge, which seems to arise at all times in German-speaking countries, is that Morell Mackenzie was a Jew.

It was said that his real name was Moritz Markovicz, and that the grandfather of this so-called Englishman was a Polish Jew of the name of Markovicz, who left Posen and settled in England. To this, Mackenzie made a very amusing and tactful reply. He says:

"My respected grandfather, who was extremely proud of his Highland descent, and who never set foot outside the United Kingdom, would doubtless have been surprised to hear that he was born in Posen and was a Polish Jew! . . . I need not say that if I really did belong to the remarkable race which has produced so many men of the highest distinction in every department of literature, art, and science, so far from being ashamed of such an extraction I should be proud of it."

At this date what shall our judgment be upon this controversy? I believe that all physicians today would agree that the disease was cancer from the beginning and that the operation would not have been curative. In fact, there was a very good chance that it would have been immediately fatal. What any of them did, therefore, is of no consequence to the outcome.

Both surgery and laryngology were young in those days and the older members of the medical profession can remember with some sense of irony how frequently surgeons of forty or fifty years ago undertook hopefully operative tasks for the removal of cancers which they would now forego altogether as being hopeless. Mackenzie is at pains to show, and there is no doubt about it, that practically every case

of cancer of the larynx so proved, and which was operated, was dead within a few months, or years at the most, from the time of the operation. Even today, with the advantage of the use of radium and the x-ray, as well as operative procedure, the cases which have been called "cured" must be certainly less than 25 per cent and probably less than 10 per cent.

On one side of the ledger, it must be admitted that the German physicians were right in their diagnosis and, quite properly, they were unswayed by the report of the pathologist. Mackenzie's accusations as to the unfitness of most of them, as to the roughness and cruelty of Bramann and of von Bergmann can hardly be justified except for the fact that von Bergmann was undoubtedly extremely rough at one time. The bickerings as to whether the condition in the lungs was abscesses or metastases, as to whether during the Emperor's last hours von Bergmann caused a small abscess in the throat, are matters of very little importance.

On Mackenzie's side, I believe modern physicians would say that his proposal to remove a piece of the growth for biopsy was quite justifiable and that he proceeded in the best modern manner.

After the report of the German physicians Mackenzie published a book called *The Fatal Illness of Frederick the Noble* and it by no means was universally approved by the British medical profession. In fact, he was censured by the Royal College of Surgeons and immediately sent in his resignation.

The quarrel, however, was not confined to the physicians. Aside from the fact that they took the unusual position of appealing directly to the public, with the consequence that the public were made a party to the quarrel, the royal houses of Great Britain and Germany were involved.

Bismarck was once again supreme after the Emperor's death. As soon as it was known that he was dying, a cordon of soldiers was secretly drawn around Friedrichskron. The Master of the Household ordered that no correspondence by anyone inside the Palace, including the doctors, was to be carried on with anybody outside. The widowed Empress was made a prisoner. It was, says Ludwig, "as though a monarch

had been murdered, and his hostile successor, long prepared, had seized upon the newly acquired authority."

When Frederick moved into the house known as the New Palace, about a month before his death, he changed its name to Friedrichskron. Less than a month after his father's death, William let it be known that he objected to his father's name being perpetuated in the name of the Palace, and restored its title to that of the New Palace.

When the new Emperor opened the Imperial Parliament he pointedly left out any mention of his father and promised to "follow the same path by which my deceased grandfather won the confidence of his allies, the love of the German people and the good will of foreign countries."

Such petty insults made a complete breach between the two royal houses. When the time came for a German official to announce officially to Queen Victoria the accession of the new German sovereign, another incident occurred. The Ambassador was General von Winterfeldt. He was granted an audience at Windsor Castle. A few days later the British Military Attaché in Berlin wrote to Queen Victoria's Private Secretary, Sir Henry Ponsonby:

"The young Emperor spoke to me this morning of the cold reception his special Envoy, General von Winterfeldt, had received at Windsor. The Emperor is much hurt."

When this letter was read by Queen Victoria, she wrote:

"The Queen intended it should be cold. She last saw him as her son-in-law's A.D.C. He came to her and never uttered one word of sorrow for his death, and rejoiced in the accession of his new master."

Such incidents could not be kept from the people of the two countries generally so that the ill feeling which the incident engendered became quite universal. Further consequences were inherent in the situation itself.

The views of Prince Frederick and the Crown Princess Victoria were notoriously liberal. Unquestionably if they had lived they would have given Germany a liberal constitutional government in the widest sense of that term. Their sympathies were all against Empire, aggression and war. They formed a party completely op-

posed to the policies of Bismarck and the entire Junker group. Personally, Frederick was of the kindest disposition, generous, thoughtful of his inferiors, infallibly courteous, and the impression which he made on others reflected those qualities. His relations with his English relatives, and with Englishmen in general, were extremely cordial. Everywhere he made a favorable impression. His son and successor was not of his temper, either in regard to domestic or world politics, or his disposition. What his policy in world politics resulted in is only too well known. The impression that he made on the English people may be gathered from the account in André Mourois' *The Edwardian Era*.

At the time of the marriage of his uncle, the Prince of Wales, William had been present and had long retained memories of the ceremony, the splendid cloaks of the Knights of the Garter and the big drum of the Horse Guards. To England he often returned, attracted and anxious. No one ever wanted to have the English love him more than he did.

"In that country of silence and reserve he felt himself loud and loutish, and he displeased by his very desire to please. Everything about him astonished and shocked the English. He was loudly dressed; he was noisy in speech; he rounded off his visits by presenting gentlemen with very ugly tie-pins formed in huge Gothic W's. Without any clear perception of the finer shades of distress raised by his presence, he was aware, as soon as he set foot in England, of a vexatious resistance. He strove to impose on his youthful German Court an English code of etiquette: 'ministers no longer dared to come in the evenings without dress shoes, and all the old dowagers kept rubbing their sore feet.' His grandmother, Queen Victoria, was very fond of him. To her he was her 'dear grandson' and that sufficed. In the eyes of the rest of the family he remained the *enfant terrible*, whose outbursts were dreaded. This he knew, and the sense that people wanted to treat him as a mischievous boy made him all the more obstinate."

Whatever the different threads that went to make it up, the consequence was that Edward VII was responsible for forming the entente cordiale between England, France and Russia, and guaranteeing the neutrality of Belgium.

With all these events in mind, is it possible to deny that however deeply rooted the basic cause in economic necessity, that there were some laryngological causes of the Great War?

CARBON MONOXIDE POISONING

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DETROIT, MICHIGAN

Probably the commonest form of poisoning at the present day is that produced by the inhalation of gas containing an appreciable amount of carbon monoxide. This is an ever-present danger due to the fact that practically all so-called "producer gases," including those artificial gases used for heating and illuminating, contain approximately 6 or 7 per cent of carbon monoxide, a concentration which will cause death in a very short time.

Death by carbon monoxide poisoning is preceded by a rather profound stupor, and is characterized by the red color of the skin and the fact that the blood is cherry-colored, due to the formation of a relatively stable compound between the carbon monoxide and the hemoglobin of the blood. This compound may be broken up by the forced inhalation of oxygen at an adequate partial pressure, but mere exposure to the air in which the partial pressure of oxygen is approximately one hundred and fifty millimeters of mercury is inadequate to effect this change because the combination be-

tween carbon monoxide and hemoglobin is more stable than that existing between oxygen and hemoglobin.

Natural gas is said to contain a lower percentage of carbon monoxide than does artificial gas, and is consequently less harmful when inhaled. Carbon monoxide is produced whenever imperfect combustion of carbon takes place. It is colorless, odorless, and inflammable, burning with a bluish flame. The principal other ingredients in commercial gases are methane or marsh gas, CH_4 , and a variety of substances mostly be-

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longing to the paraffine group, which are classed as illuminants.

The frequency with which carbon monoxide poisoning takes place at the present time is due to the extensive use of the automobile with its internal combustion engine, which contaminates the air in every large city. It is impossible to estimate the percentage of carbon monoxide in the exhaust from an automobile, although it is known to be rather high, as deaths caused by inhaling the vapors produced by an automobile running in a closed garage are very common; and the exhaust has been successfully used for the destruction of vermin. The writer has talked at length with a number of members of the traffic division of the metropolitan police, and has found that they are unable to remain at their posts for any great length of time on account of severe headache and other symptoms which probably are produced by inhaling the exhaust from the cars that continually pass them. It seems probable that every city dweller is a victim of chronic carbon monoxide poisoning, which may account for some of the symptoms that we are apt to refer to our present-day speed of living.

Various well-known authorities have stated that the germination of seeds is not affected by the presence of carbon monoxide, although the constant exposure of green leaves to the gas may bring about their destruction. This, if true, would probably be explained by an action of the gas upon the chlorophyll of the green leaf, somewhat analogous to that upon the hemoglobin of vertebrate animals, preventing respiration and causing cessation of vital processes. The writer recently in the course of some experiments exposed seeds to an atmosphere containing a small percentage of carbon monoxide, and found their growth to be definitely inhibited, thereby demonstrating the effect of the gas upon plant growth. Exposure of similar seeds to natural gas

failed to produce this effect; and exposure under similar conditions to carbon dioxide did not appear to retard the growth of seeds at all. This would seem to indicate that the gases which are now used for illumination and heating in Detroit are not especially deleterious so far as plant growth is concerned.

But the fumes derived from the multitudes of automobiles which pass constantly on the streets may be harmful, not only to the human inhabitants of the city, but may have a tendency to destroy vegetation, which adds so much to municipal beauty. The remedy for this situation would seem to be either for the public to do less driving and to learn so to control its engine that better combustion would ensue, thus producing more carbon dioxide and less carbon monoxide than the average engine does at present; or else for the manufacturers to produce a better engine in which combustion will be more complete. These propositions seem to be about equally unattainable.

In a case of carbon monoxide poisoning it is not advisable to call the physician unless you are reasonably sure that he can perform artificial respiration. It is, as a rule, much better to call the Fire Department, the Police Department, or the Gas Company, as they are better equipped to cope with the situation than is the average doctor. If the patient begins to breathe voluntarily within an hour or so, he may recover; but if repeated efforts fail to elicit voluntary respiration, he usually dies. Respiration once re-established, the hypodermatic injection of drugs, such as suprarenal extract, may be indicated; and the patient should be kept warm, and receive massage tending to promote the return of the blood to the heart. Once resuscitated, the victim seldom undergoes a relapse, and is not necessarily hypersusceptible to the effect of the gas.

THE RELATIONSHIP OF THE MICHIGAN DEPARTMENT OF HEALTH TO THE PRACTICING PHYSICIAN*

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The work of the Michigan Department of Health is little known to many Michigan physicians. Feeling that members of the medical profession are entitled to and desire this information, I take this opportunity of presenting to you a brief description of our plan of organization and activities with special emphasis upon what is done to assist physicians in their work.

Bureau of Communicable Diseases

Communicable disease control has been one of the major functions of the Michigan Department of Health since its organization as the old State Board of Health back in 1873. Many of our activities today are still related, directly or indirectly, to this fundamental objective, though the emphasis has shifted from control to prevention. Perhaps in no other phase of public health protection is close coöperation between physician and health officer more vital to the general welfare. In the Michigan Department of Health all activities related to prevention and control of communicable diseases are administered by the Bureau of Communicable Diseases.

Members of this bureau are constantly analyzing and evaluating reports from health officers in all parts of the state, and advising local health officers and physicians, through the medium of the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY, of an unusual incidence or outbreak of communicable disease. The director and three epidemiologists are available at all times for field service to physicians and local health officers in the location of sources of disease outbreaks, in consultation regarding diagnosis of rare or unusual communicable diseases, and in isolation and quarantine procedures and their enforcement. State public health laws and regulations are also enforced by an officer attached to this bureau.

A very striking example of the coöperation of this bureau with the local physicians was illustrated by the epidemiological investigation of the extensive trichinosis outbreak at Capac during the past month. The bureau is also sponsoring a special program in typhoid fever control in which every re-

ported case of this disease is investigated by an epidemiologist from the state or local health departments. The follow-up of such cases and the investigation of outbreaks have made possible the discovery and control of 200 typhoid carriers, probably the greatest single public health menace this disease offers today.

This bureau also maintains a system of biologic distributing stations throughout the state where all of the biologics produced by the department are readily available to physicians at any hour. The problem of providing such service through the rural areas of Michigan and at the same time holding the wastage of unused and outdated products to a minimum is in itself no small task.

Advice as to the proper use of biologics is constantly being given to physicians upon request. Demonstrations of certain diagnostic tests and their interpretation are also arranged when desired.

An epidemiologist especially trained in tuberculosis control is in direct charge of this phase of the work. He gives service to physicians, either directly or indirectly, through local health officials and nurses in providing for tuberculin testing and x-ray service, and in arranging for hospital or sanatorium care. Likewise, he assists in follow-up work of patients and contacts to help ensure that such individuals carry out instructions given by their family physician and report to him as advised.

The bureau collaborates in the writing of educational pamphlets on the common communicable diseases. These are available to physicians and are used by many for distribution to their patients. References to scientific articles are also furnished to physicians upon request, particularly for the uncommon communicable diseases, and ad-

*Presented before the Detroit Academy of Medicine, January 26, 1937.

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vice is occasionally requested and given on the treatment of such diseases.

Bureau of Engineering

Work in environmental sanitation is as basic in the department's program as efforts at communicable disease control, and of course the two are inseparably related. All activities having a sanitary engineering aspect come under the Bureau of Engineering. These activities include supervision of public water supplies, sewerage systems and sewage treatment plants, garbage collection and disposal, natural and artificial swimming areas, and resorts and tourist camps.

The engineers examine plans for all new water systems and extensions to existing systems and for public sewerage systems and artificial swimming pools. If the plans are satisfactory, they are approved and a construction permit is issued.

An unprecedented advance in both water supply and sewage disposal facilities has been made possible within the past five years by grants of federal funds. As a result of this rapid improvement, the unsafe and questionable public water supplies in the state can be counted on a single hand, and with completion of the Detroit sewage treatment plant the sewage from approximately 80 per cent of the urban population will receive treatment before being discharged into public water courses. I need not emphasize what this may mean to the public health of the future.

A popular phase of the bureau's work is the inspection of roadside water supplies for the protection of the traveling public. Safe supplies are marked with a metal sign. Resorts and camps are annually inspected and rated, and golf course water supplies are receiving increasing attention.

Training of water and sewage treatment plant personnel throughout the state is an interesting phase of the bureau's work. With the coöperation of Michigan State College, short course schools are held annually for operators. The bureau also conducts examinations for certification of the personnel. Every effort is made to ensure the effective operation of these plants.

Bureau of Laboratories

The Bureau of Laboratories of the Michigan Department of Health is essentially a service division to other bureaus of the de-

partment and to the physicians of Michigan. We have a branch laboratory in Houghton and a division of the laboratories in Grand Rapids to facilitate the service.

The laboratories furnish fundamental scientific information for the control of communicable diseases. The laboratories serve the Bureau of Child Hygiene and Public Health Nursing, The Bureau of Engineering, Stream Control Commission, State Police, State Welfare Department, State Administrative Board Construction Division, and the State Geologist. Medico-legal work is also done for sheriffs and prosecuting attorneys of the various counties.

In addition to this, there are certain statutory functions that the laboratories are required to carry out:

First, the laboratories are required by law to manufacture and distribute biologic products for the control of communicable diseases. At present the laboratories are manufacturing for free distribution diphtheria antitoxin, Schick test material, alum precipitated toxoid, scarlet fever antitoxin, smallpox vaccine, typhoid fever vaccine, tuberculin, rabies vaccine, tetanus antitoxin, and antimeningococcic serum. Silver nitrate ampules for ophthalmia neonatorum are also distributed free. We manufacture some scarlet fever toxin for active immunization for experimental purposes only. We are preparing antipneumococcus serum, Types I, II, V, VII and VIII. We are not yet distributing antipneumococcus serum and we cannot until additional funds are available.

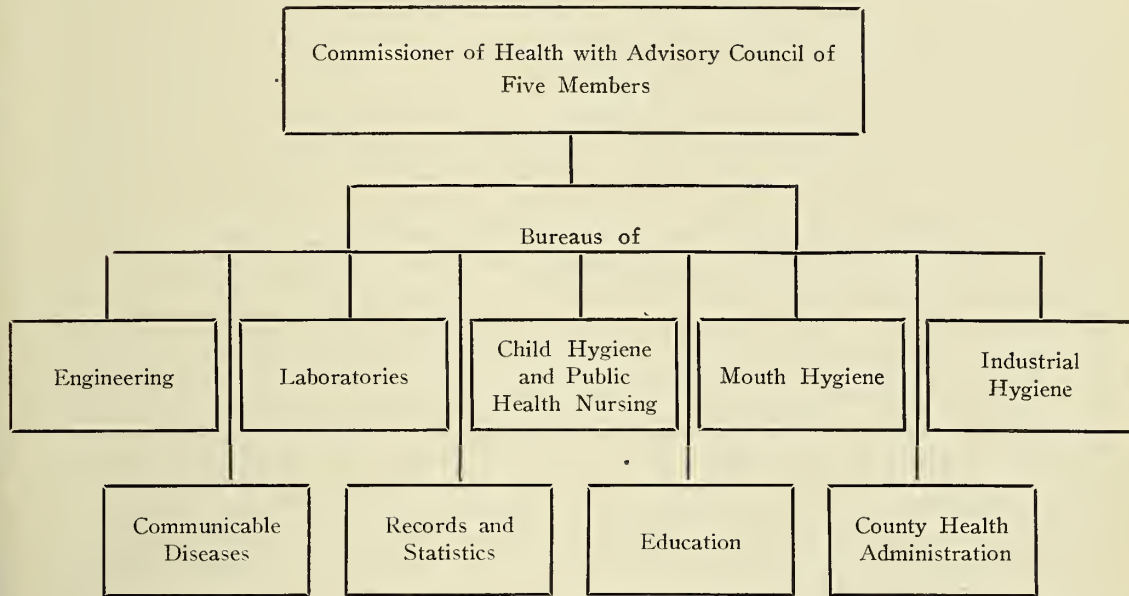
State production of biologics saves the public a large amount of money and, incidentally, saves the physician money also in the unpaid bills of his patients for biologic products. The distribution of these products has increased approximately 25 per cent in the last two years. If the City of Detroit had been forced to buy on the open market products received from the Michigan Department of Health last year, it would have cost them, at the lowest contract price, more than a hundred thousand dollars. A proportionate amount was also saved in other urban and rural districts.

The next most important statutory function of the laboratories is the regulation and control of public laboratories selling service. There are approximately 150 laboratories selling some form of service related to the control of communicable diseases. In 1920

there were only twelve laboratories in the State making examinations in the serodiagnosis of syphilis. It was extremely difficult to get any agreement among these laboratories. In our last check-up of the 111

to function satisfactorily. We admit university or college graduates to a six to nine months period of training. They follow a rotating system similar to internship in a hospital. From these volunteer workers we

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laboratories making examinations in the serodiagnosis of syphilis, the tabulation of reports on the same specimens showed that only three failed to check with sufficient accuracy to be diagnostic on the specimens sent out. These three laboratories have since repeated the test and have found the source of their difficulties. I believe that the serodiagnosis of syphilis in Michigan is remarkably dependable. Laboratories are also checked for examinations for tuberculosis, gonorrhea, and diphtheria. As time permits, other tests will be devised for raising the standard of the service. The improvement in the four years that this law has been in effect is amazing.

The teaching function of the laboratories has been developed to a point where credit for courses at the Lansing laboratory is given by the University of Michigan, Michigan State College, Olivet College and Albion College. We have developed a method of selecting our junior bacteriologists and training people for other jobs that seems

make recommendations to laboratories in need of laboratorians.

In the last year the Commonwealth Fund has made a commitment for the study of pneumonia products. The funds were given to the State of Michigan to attempt to lower the cost and improve the quality of such products. The appropriations have been made by the Commonwealth Fund for the first three years of the study with the understanding that grants for the last two years of the five-year study would be passed upon depending upon the status of the research at the end of the three-year period. Much of the work on this problem is chemistry and immunology and will be done at the Biologic Products Division of the State Laboratories in Lansing. The clinical aspects of the study will be carried out in Receiving Hospital in Detroit. A portion of the expense of doing the pneumonia work in Receiving Hospital will be paid by the Commonwealth Fund.

At the Grand Rapids division of the lab-

oratories, for several years Dr. Kendrick has been investigating the antigenicity of pertussis vaccine. The results have been very promising—not nearly as contradictory as some of the other published material on whooping cough vaccine. At the moment this investigation is stopped as it was largely supported by W.P.A. funds which have been exhausted. We have every hope that it will be started again shortly.

Through W.P.A. funds the State Department of Health was able to construct a new building north of Lansing adjacent to the Biologic Products laboratory, thereby consolidating its technical work. The building will also house the laboratories of the State Department of Agriculture. There is every reason to believe that much duplication of service can be eliminated with proper correlation. The laboratories are now moving into the new quarters and will be settled within the next month and ready for visitors.

Bureau of Records and Statistics

Michigan has the second most complete state system of vital records in the country. Massachusetts was the first state to require registration of births and deaths, passing a law in 1837, and the Michigan law was enacted in 1867. We have on file in the Bureau of Records and Statistics approximately eight and one-quarter million records. Each year this total is increased by reports of approximately 100,000 births, 50,000 deaths, 30,000 marriages and 10,000 divorces. This is, to say the least, a tremendous job of bookkeeping. All of these records are indexed and immediately available and they are in constant demand by persons throughout the state for legal purposes.

The Bureau of Records and Statistics compiles the daily information on the prevalence of communicable diseases that is such a necessary safeguard in the control of epidemics. It studies the death certificates, those important records which determine the public health program and are an index of its success. As a result of these statistical studies, articles are prepared for publication in the *JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY*, *Michigan Public Health*, and the press of the state. Such data aids the medical profession and local health officials in knowing when, where, and

to what extent disease exists throughout Michigan. The current analyses which are made of the causes of death among the various age and sex groups are of vital importance in effectively directing a program of preventive medicine and positive health education.

Bureau of County Health Administration

The provision of better public health service for rural areas has been a recognized need in Michigan, as in other states, for many years. Upon the local administrative unit, whether it be city, county or district, rests the final success of the public health program. However well organized and efficient a state health department may be, its functions are inevitably, and rightly, advisory and supervisory. The local unit is the one that carries on the day-to-day program that protects, or fails to protect, the community's health.

Michigan's system of local health administration dates back to 1832, when the Legislative Council of The Territory of Michigan passed "An Act to Provide for the Preservation of the Public Health in the city of Detroit, and other Places in the Territory of Michigan." From that time to 1927, when the county and district health department law was passed, local administration depended upon an unwieldy group of health officers, most of them part-time, many of them laymen, and all of them underpaid. Only the cities had adequate service.

The picture is very different now. Assistance from the Children's Fund, the W. K. Kellogg Foundation, local governmental units, and lately the Social Security Act, added to the subsidy from the State has made possible full-time public health service under trained personnel in 53 of the 83 counties in Michigan. More than 50 per cent of the rural people of the state now enjoy the health protection that is admittedly the minimum permissible under enlightened government.

The program of the county health departments as carried on in Michigan provides for the following services:

A communicable disease service which, in addition to the usual procedures of isolation and quarantine of sick individuals, lays special emphasis upon the necessity of increasing community resistance against such

epidemic diseases as diphtheria and smallpox, and endeavors to interpret to the public the services which are available to them from the practicing physician and the desirability of their making use of them.

A program for the improvement of environmental sanitation.

A maternal and infant hygiene service which has been worked out with the coöperation of the physicians in each of the organized counties, and which has resulted in a statistically significant reduction in both infant and maternal deaths in these counties, as compared with counties which remain to be organized.

A pre-school and school hygiene program which stresses the desirability of periodic health examinations and encourages parents to have such defects as are found corrected. As a result of these examinations, many children are discovered to have remediable defects of which the parents had no previous knowledge. These are referred to their family physician or dentist for treatment.

A crippled children's program which is largely concerned with case finding and acquainting parents with the provisions made in Michigan for treatment and rehabilitation of such children.

In addition to these activities, the county health departments act as distributing stations for biologics provided free to the physicians of the state by the Michigan Department of Health.

All of the activities of the county health departments are carried on with the coöperation of interested lay and professional groups, and one of their most productive activities is the education of the people in the community to a better appreciation of the services which are available to them from the practicing physicians and dentists.

Bureau of Child Hygiene and Public Health Nursing

Promotion of maternal and child health activities is the function of the Bureau of Child Hygiene and Public Health Nursing. A separate division within this bureau works in an advisory capacity with public health nurses throughout the state and directly supervises all county nurses.

During the past year this bureau has administered a greatly expanded maternal and child health program made possible by spe-

cial financial grants from the Federal Children's Bureau as authorized under the health provisions of the Social Security Act. The detailed budget of funds expended under this enlarged program is given in an accompanying outline. The program itself has been developed in coöperation with the council and interested committees of the Michigan State Medical Society and with representatives of the Michigan Branch of the Academy of Pediatrics and the State Nurses' Association.

Following the approval of these organizations, the program was presented and accepted by each local county and district medical society before it was initiated. As a result, a three-fold state-wide educational program in maternal and child health is in operation, various phases of which have been conducted for the additional instruction of the health professions, the education of parents, and the protection of children. The ultimate objective of the program is the creation of a permanent community sense of responsibility for the health of its mothers and children.

The first phase of this expanded program was a plan for post-graduate instruction for physicians. A refresher course in obstetrics was conducted for six weeks by the chairman of the Maternal Health Committee of the Michigan State Medical Society at four centers in the northern part of the Lower Peninsula. The course was free to all physicians and the resulting attendance indicated a gratifying interest. Future courses in pediatrics and obstetrics are being planned for this and other areas of the state.

In addition to the refresher course a special series of lectures related to maternal and child health has been prepared for the regular University of Michigan postgraduate courses in accordance with plans developed in coöperation with Dr. James D. Bruce, vice president of the University and dean of postgraduate medicine.

As an additional aid in this professional educational program, a motion picture on prenatal care has been made at Harper Hospital, Detroit, with the coöperation of the Maternal Health Committee of the Michigan State Medical Society. Expenses of members of this committee or physicians recommended by the committee are provided for lectures on maternal health.

Essential to the efficient development of

the maternal and child health program has been the special training of nurses for this service. Intensive training courses have been conducted by the University of Michigan for this purpose, and many of the graduates of these courses are now conducting the programs in the various counties with the coöperation of the local medical societies. The prenatal nursing service includes home calls on prenatal patients, instruction according to the desires of the attending physician, reports to the attending physician after the initial call on his patients, and follow-up calls after delivery to encourage final check-up by the physician. Twenty nurses are now in the field carrying on prenatal nursing services or the general maternal and child health program. In fact, with the inauguration of this program during the past year, practically every county in Michigan for the first time is served by at least one public health nurse, sponsored either by state or local health departments.

The general educational program of this bureau is directed to parents in an effort to create a demand for earlier, more frequent, and adequate medical supervision of mothers and infants. Women's classes are conducted by staff physicians and the topics of the sessions which continue for eight weeks include Common Emergencies and How to Meet Them, The Body and How it Functions, Special Health Problems of the Adolescent and the Woman, The Beginning of Life, Care and Training of Babies, Care and Training of Young Children, Preventing Acute Infectious Diseases, and Food in Relation to Health and Disease.

Many women are reached through the series of prenatal letters which are mailed once each month to prospective mothers on request of physicians or the mother herself. These letters call attention to the importance of early and regular medical care during pregnancy and childbirth, and they include general advice on the hygiene of pregnancy.

Another form of group education conducted by this bureau is that provided for high school girls through child care classes taught by staff nurses in rural schools. These classes cover a period of twelve weeks and consist of talks and demonstrations on the care of infants and growing children with special reference to medical

supervision, protection against communicable diseases, and nutrition.

In addition to functions already outlined, the general lecture service of this bureau and carefully prepared instructive literature all contribute to the educational program to lower morbidity and mortality and to raise health standards among mothers and children.

Bureau of Mouth Hygiene

The progress of medical science in discovering causes of disease has led to the inclusion of mouth hygiene in the public health program. Since infections of any kind may seriously affect health, and since the teeth are one of the greatest sources of chronic infections, health agencies are interested in securing the prevention or removal of such infections. Emphasis is placed upon work with younger age groups where preventive measures are of the maximum value.

The Bureau of Mouth Hygiene of the Michigan Department of Health was established on January 1, 1926. Until this year, the personnel has consisted of a director and a part-time stenographer. With additional funds made available through the Social Security Act, a dentist and a dental hygienist have been added to the staff, and the stenographer gives full time service.

The work of the bureau is entirely educational. The activities consist of lectures, demonstration examinations, consultations, and the provision of educational material. These are carried on mainly through the schools, the teacher training institutions, and interested adult groups such as parent-teacher associations and mothers' clubs.

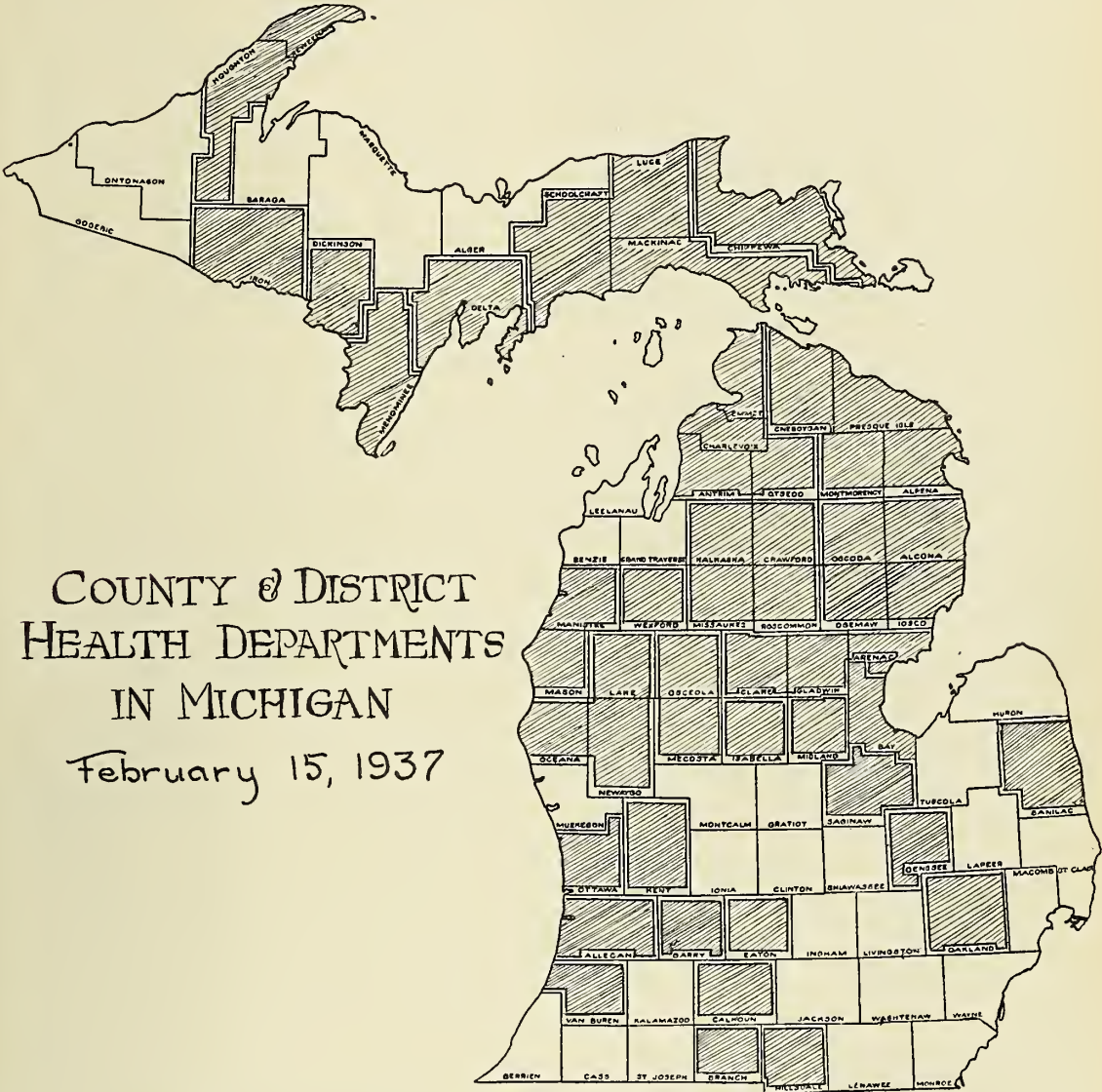
Bureau of Industrial Hygiene

The most recently created service of the department is offered through the Bureau of Industrial Hygiene. The work of this bureau adds another link in the efforts of the department to better the health and living conditions of the individual from the prenatal period to the grave. The purpose of the new bureau is to study the conditions under which people earn their livelihood and to correct those conditions known to cause industrial diseases. The bureau will furnish service to the employer and the employee, either feeling free to appeal to the bureau for investigation and correction of unfavorable conditions.

Industrial hygiene is primarily a problem that requires the close coöperation of the physician and the engineer. The physician has always had these cases come to him, but he has had no engineering service available

interested in determining the conditions responsible for the cases coming to their attention.

At the present time the Bureau of Industrial Hygiene is coöperating with the



COUNTY & DISTRICT
HEALTH DEPARTMENTS
IN MICHIGAN
February 15, 1937

Shaded portions show counties having full-time county or district health departments.

to assist in locating the cause of trouble and in correcting it. The department is now making this engineering service available to the medical profession of the state. The Bureau of Industrial Hygiene will be equipped with scientific instruments for the determination of dust concentrations and the presence of poisonous solids, liquids, gases, vapors, mists and fumes, and all of these facilities will be available to physicians in-

Bureau of Communicable Diseases in a study of high pneumonia morbidity and mortality in a foundry in western Michigan.

Bureau of Education

To list education as a separate activity of the department is in a sense misleading because education is the underlying objective of practically every phase of the public health program. Only when such a pro-

gram is clearly understood by the people it is designed to serve and actively supported by them can it be expected to succeed. In the older and more restricted field of communicable disease control, legal compulsion played a part, and even today no health officer would minimize the value of a sound background of legal machinery. But compulsion is never as effective as persuasion, and in the broader program of disease prevention and health promotion to which the health professions are now committed, popular education is the one indispensable factor. The objectives of this program and the steps by which they are to be attained must be understood and subscribed to by the so-called man on the street before he will do his part, and his part is of growing importance.

As you will have noted, three of the nine bureaus of the Michigan Department of Health do nothing but educational work—the Bureau of Child Hygiene and Public Health Nursing, the Bureau of Mouth Hygiene, and the Bureau of Education. The latter bureau carries on what might be termed the department's general publicity program. On the staff of this bureau is a field representative who fills as many as possible of the hundreds of requests that we receive for general health talks before various organizations. A Health News Service to the 450 daily and weekly newspapers of the state is prepared by a staff member trained in journalism. This service has just one objective, to keep the people informed on health happenings so that they can protect their own health and give to their local health authorities any needed co-operation. Through this medium we are striving to build up in the minds of the great newspaper reading public a familiarity with the everyday principles of health protection and promotion, and a realization that the safeguarding of the public health is an accepted function of good government.

The Bureau of Education also edits the monthly bulletin of the department, written especially for members of the health professions and interested laymen. This affords us a continuing contact with approximately 5,500 persons interested enough to ask that the bulletin be sent to them. All of our educational service is free to residents of Michigan, but it is given only in answer to

MICHIGAN DEPARTMENT OF HEALTH
Social Security Funds — U. S. Public Health
Service

Year ending June 30, 1937

Central Administration	\$59,200.00
Laboratory	\$11,100.00
Education	1,800.00
Records & Statistics	3,900.00
Engineering	4,800.00
County Health Adm.	6,900.00
Mouth Hygiene	7,800.00
Communicable Diseases	5,500.00
Industrial Hygiene	12,900.00
Equipment	1,000.00
Maintenance	500.00
Administration	3,000.00
Counties	82,392.00
Genesee	10,600.00
Isabella	3,500.00
Kent	8,200.00
Midland	3,800.00
Ottawa	9,020.00
Saginaw	4,220.00
Oakland	16,887.00
Wexford	5,450.00
Dist. No. 3	4,340.00
Dist. No. 5	7,375.00
Dist. No. 6	4,500.00
Dist. No. 7	4,500.00
Cities	62,630.00
Detroit	30,000.00
Battle Creek	2,500.00
Flint	7,380.00
Grand Rapids	8,300.00
Pontiac	6,200.00
Saginaw	8,250.00
New County Health Units	31,500.00
Delta	4,500.00
Houghton-Keweenaw	9,000.00
Iron	4,500.00
Mason-Manistee	4,500.00
Menominee	4,500.00
Mecosta-Osceola	4,500.00
Training	44,567.00
	\$280,289.00
Appropriation	\$280,293.00

request. We do no wholesale circularizing or distributing of pamphlets.

Visual education has become increasingly popular during the last few years, and we have on the Bureau of Education staff a commercial artist who prepares charts, graphs, posters, and exhibit material for all of the bureaus and for loan use to local school and health authorities.

The department library of approximately 4,500 volumes with an unusually complete subscription list of 56 scientific journals is under the direction of a trained librarian and serves to keep the staff up to date as well as being available to anyone in the state wishing public health reference service.

Not the least of the responsibilities of the Bureau of Education is the answering of

MICHIGAN DEPARTMENT OF HEALTH
Social Security Appropriation
For Maternal and Child Health Services
July 1, 1936 to June 30, 1937.

	Personal Service	Travel
Administration	\$4,500.00	\$2,200.00
Two Field Physicians..	2,120.00	1,100.00
Two Nursing Directors	400.00	600.00
Seven Prenatal Nurses	8,825.00	4,435.00
Fourteen Maternal & Child Health County Nurses	20,125.00	8,855.00
Ten Child Care Nurses	12,175.00	6,333.34
Physician conducting postgraduate lecture course in obstetrics...	3,000.00	900.00
Refresher Courses	2,500.00	
Maternal Health Com- mittee		2,288.66
	\$53,645.00	\$26,712.00
Total personal service and travel....	\$80,357.00	
Supplies, or all other expenditures...		34,544.51
Total		\$114,901.51*

*Total appropriation for July 1, 1936, to June 30, 1937, plus a balance from June 30, 1936.

the thousands of letters received in the department asking for general health information. Many of these are taken care of by sending one or more of the forty popular pamphlets that we issue on the communicable diseases, sanitation, maternal and child health, mouth hygiene, and social hygiene. These letters, more than half of them from laymen who have no connection with the health professions, are an indication of a

widespread interest in health that is one of the most encouraging signs of progress.

The operation in Michigan of the Social Security Act as it relates to public health will be of interest to you. The appropriations made come under two classifications, those for public health work in general and those for maternal and child health. Those for public health in general are "for the purpose of assisting States, counties, health districts, and other political subdivisions of the States in establishing and maintaining adequate public health services, including the training of personnel for State and local health work." Those for maternal and child health services are "for the purpose of enabling each State to extend and improve, as far as practicable under the conditions in such State, services for promoting the health of mothers and children, especially in rural areas and in areas suffering from severe economic distress."

How the Social Security funds are being spent in Michigan is shown by the two budgets which I have handed to you.

You will note, also, that I have given you a map showing the counties having full-time county or district health departments. This will make clear at a glance the status of local health administration and will complete the brief outline I have given you of official public health service in Michigan today as it refers particularly to the practicing physician.

MULTIPLE NEUROFIBROMATOSIS OF VON RECKLINGHAUSEN*

R. F. WEYHER, M.D.†

DETROIT, MICHIGAN

Multiple neurofibromatosis was first recorded scientifically by Tilsensin, in 1793. Virchow's description, in 1863, was followed, nineteen years later, by von Recklinghausen's exhaustive treatise, after which his name was attached to a group of puzzling and bizarre diseases which all have one fundamental tendency in common, *i.e.*, multiple tumor growth. The terminology of these diseases itself is bewildering. For example, elephantiasis neuromatosa, mollusum fibrosum, adenoma sebaceum and subungual fibromatosis may all be varieties of the same condition.

*Read before the Clinico-pathological Conference at Providence Hospital, April 10, 1934.

†Dr. Weyher was graduated from Wayne University Medical College in 1921; interned at Boston City Hospital, was assistant resident physician, Long Island Hospital, and took post-graduate studies at Harvard Medical College, Cook County Hospital, and the University of Vienna. He is Associate in Medicine at Providence Hospital, on the visiting staff of Crittendon Hospital, and is especially interested in Internal Medicine.

Although much work has been done in this field recently, in an attempt to subdivide and clarify the etiology, the list of pathological states grouped under this heading is growing larger. They may be subdivided into two main types, those exhibiting prin-

cipally bone lesions, such as osteitis fibrosa cystica or parathyroidism, and those showing chiefly skin changes.¹⁵ The case to be described belongs to the latter group.

Some of the confusion arises from the fact that although the cutaneous manifestations are the most striking, pathologically the tumors are generally considered of a neurogenic origin.

Ewing⁶ ascribes the difficulty in classification to the complicated nature of the nerve trunks, from which tissue the tumors arise. He states that the underlying factor is a disturbance in the relations of the foetal ectoderm and the tissue it innervates. The recent work of Ballin and Morse, and the following case, however, point to an endocrine factor in at least a large number of these patients.

Although varying astonishingly in size, (from the head of a pin, to a mass weighing forty-one pounds), the tumor growths have several common characteristics, such as pigmentation (usually a "café au lait" color), a seedless-raisin like consistency, and following injury, a tendency to hemorrhage, stimulation, and growth. Moreover, all types of von Recklinghausen's disease show a definite tendency to sarcomatous change.

In addition to any part of the body surface, they may develop in the iris, optic nerve,⁸ the brain, meninges, and spinal cord,¹³ the stomach,⁹ the labia,¹ the external auditory canal,¹⁹ the hard palate,¹⁰ the bladder,¹² and the adrenals.¹¹

Neurofibromatosis may be present at birth or may develop at any age. It is as common in males as in females, but is rare in negroes, although a few cases have been reported.¹⁸

There is a definite hereditary tendency, according to several authors,^{2,3,12,16} though the children may exhibit only incomplete forms of the disease. Prieser and Davenport state that von Recklinghausen's disease occurs in successive generations and is a dominant factor in inheritance.

The prognosis is hopeless for recovery, but good for a considerable length of life after the development of the tumors. Death occurs frequently from sarcomatous degeneration, occasionally from hemorrhage after trauma, sometimes from progressive involvement of the whole peripheral nervous system, after which such patients become

cachectic, listless, and eventually die from general exhaustion (Unna), and not infrequently on the operating table during removal of the larger tumor masses.

The complications may be mechanical, surgical, mental, or malignant.

Knapp¹⁴ describes a white male of twenty-five whose left ear lobe hung down like an apron over the neck, and whose upper eyelid, nostril, and upper lip on the left side lay in folds like a proboscis. Mechanical pressure on the cord from these growths may cause paralysis. Several cases have been reported in which uncontrollable hemorrhage, severe shock,⁴ and sudden death occurred during surgical anesthesia, or during attempted excision of the larger growth. Mental changes are not constant, but when present, usually develop at an early age.⁴ In Phillips's case,¹⁶ the entire family showed a low mental and moral development. Malignant change, nearly always sarcomatous, may occur spontaneously but it is very prone to develop after surgical trauma. Even after apparently complete excision, the scar may develop a sarcoma within a few months.^{11,20} In addition to surgery, other forms of treatment are also very unsatisfactory. Endothermy has been tried on these growths without success, because the tumors returned larger than before.⁷ X-ray therapy in the following case was of some benefit.

Case Report

Mrs. E. B. was examined on October 10, 1933. She had noticed a growth on her right shoulder since birth. Her father died of laryngeal carcinoma and her stepfather died of prostatic carcinoma and tertiary syphilis. Her mother has tertiary syphilis at present. Her husband, a half sister, and one brother are well, none having any skin abnormalities. At about six months of age she had measles, varicella, and pertussis. Variola occurred at eight years, and diphtheria at nine. She completed the eleventh grade in high school and was the best student in her room in geometry. She was told, at the age of fourteen, that she had a "heart leakage." She married at twenty, and was delivered of her first child instrumentally at twenty-one, which was apparently normal in every way. It died at eighteen months of pneumonia. The second child was born spontaneously six years ago. He is mentally alert, and is underweight (38½ pounds), but 44 inches tall. He presents an oval patch of long sparse black hair over the upper sacrum, and three small brown pigmented areas over the abdomen.

The third child, aged three, is 37 inches tall and weighs 30 pounds. He shows a somewhat protuberant abdomen, an internal right strabismus present since one year of age, one small hairy patch on the right shoulder, and a rather stupid, listless expression.

Shortly before the onset of her menses (at fifteen), the patient began to notice various sized, painless, soft, pink and brown mole-like tumors which first developed on her back, then on her face, arms, and hips. These remained about stationary until after the birth of her first child at twenty-one, when many new tumors developed over her whole body and some of the pre-existing masses increased in size.

For a year before her death, she became increasingly short of breath and easily fatigued. There was no chest nor arm pain but an occasional slight cough on exertion. During the last six months, the pendulous mass on the right shoulder enlarged to about twice its former size. It also became moist and gave off a heavy unpleasant odor. There was a dragging sensation in the mass for some years, and for several months a dull ache and an occasional sharp pain in the shoulder at its site of origin. Her habits and remaining history were irrelevant.

Physical examination showed a very thin young white female of twenty-nine years, height 62 inches, weight 89 pounds, with a temperature of 98.0 and a pulse of 90 to 104.

There were approximately four hundred soft spherical raised tumors varying in color from bright pink to dark brown, and in size from a pin head to a large grape, scattered over the face, torso, back, arms, and thighs, but not on the scalp, hands, nor legs below the knees. The tumors were thickest around the nipples and the trunk. A pendulous, very soft, dark brown, flat mass about 2 to 3 cm. thick, approximately 6 cm. wide, and 20 cm. long extended from the skin over the right clavicle. It felt like scrotum, was quite moist, and had a rather strong sebaceous odor.

Severe dental caries, infected septic tonsils, a small but indurated, symmetrical thyroid, a right Bartholin's cyst, a lacerated chronically inflamed cervix, and a retroverted uterus were also found. Both ear lobes were small and the right auricle showed a duplicate tragus. The neck showed visible venous pulsation and the heart was somewhat rapid but regular. There was increased dullness and a marked systolic palpable thrill along the right sternal border, felt best in the second interspace; and a loud sawing systolic murmur at the aortic area, transmitted down to the base of the heart and to the left. The blood pressure was systolic 138, diastolic 104. The blood Wassermann was negative in April, 1930, and the Kahn was negative in November, 1933. The spinal fluid presumptive and Kahn tests were negative on March 22, 1934. The urine was normal, the hemoglobin 14.4 mgms. per 100 c.c., erythrocytes 4,530,000, leukocytes 7,300, color index .97, neutrophils 80 per cent, small lymphocytes 20 per cent and the microscopic blood picture was normal. The basal metabolisms were plus 24 per cent and plus 32 per cent. The blood serum calcium was 13.0 mgm., two weeks later 14.3 mgm., and three months later 10.42 mgm., and two serum phosphorus estimations were 3.73 mgm., and 3.0 mgm. The spinal fluid total calcium was 7 mgm. The blood clotting time was 5½ minutes on March 6, 1934. A twenty-four hour urinary excretion showed the calcium to be 0.12 mgm. and phosphorus 0.444 mgm.

Two electrocardiographs made at separate laboratories showed a high Q.R.S. voltage, normal sinus rhythm, inversion of leads I and II, upright lead III, and left axis deviation. The conclusions were "serious myocardial damage, left ventricular preponderance, coronary artery disease, and aortic involvement of probably acquired origin."

X-rays of the chest corroborated some of these findings as there was a definite localized dilatation

of the ascending portion of the aorta. There was no evidence of enlargement of the cardiac shadow, roentgenographically. Fluoroscopically, the aortic dilatation was seen to pulsate synchronously with cardiac systole and to be expansile. It was most prom-



Fig. 1. Appearance of patient upon examination.

inent in the third interspace, anteriorly, and shifted in position, along with the rest of the mediastinal contents, when the patient was placed semi-horizontally.

A roentgenographic study of the chest was made by Dr. Hans Jarre who concluded that there was a dilatation of the first portion of the ascending aorta, which was not aneurysmal in the sense of a diseased process in the aortic coats, and was not accompanied with any roentgenographic cardiac enlargement. He did not consider this to be a congenital process.

An x-ray of the skull showed a characteristic box like spreading of the sella turcica with relative thinning out of the posterior clinoid processes. X-rays of the pelvis, long bones, and spine were negative.

Two of the larger pendulated tumors on the back were removed and sectioned. Dr. James E. Davis' report of the microscopic findings showed the tissue to have the general architecture of fibrous tissue with very numerous small oval nuclei. At the periphery the nuclei were not so numerous and there was more vascularity. In the older portions of the section, the cell picture was essentially that of nervous tissue but there were places where the connective tissue was definitely increased and young fibroblasts were present. The diagnosis was neurofibroma.

Treatment

Because of the history of dyspnoea, slight cough on exertion, and the electrocardiograph findings, the patient was given digitalis leaf powder to the point of tolerance continuously for two months with no improvement of these symptoms. From November 29, 1933, to February 28, 1934, she was given seven treatments of unfiltered x-ray therapy to the epaulet-like shoulder

mass. One month later this tumor was decreased about 25 per cent in size. It was dry, more wrinkled, and the former unpleasant odor could not be detected. The patient stated that no pains had occurred in the mass for several weeks.

spells in bed, and at 7:30 P. M. became very agitated, sat up suddenly and fell back dead.

After embalming had been completed the next morning, autopsy permission was obtained, with the provision that no dissection of the head would be made. The body

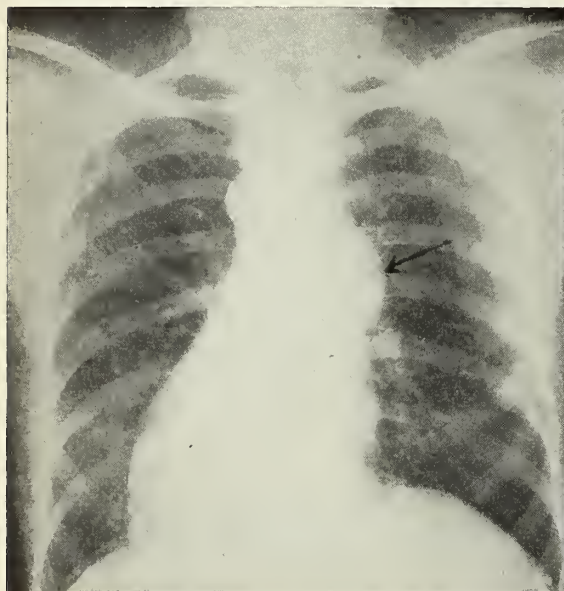


Fig. 2. Radiograph of the chest showing dilatation of the first portion of the ascending aorta, not aneurysmal in the sense of a diseased process in the aortic coats.



Fig. 3. Radiograph of the skull showing a peculiar box-like spreading of the sella turcica with relative thinning out of the posterior clinoid process.

Subsequent Course

The patient did not return until July 26, 1935, when she came to the office in a critical condition, complaining of an increasingly severe short, dry cough which began two month ago, marked dyspnoea, vertigo, weakness, and metrorrhagia for the past three months. She appeared very weak and extremely pale. Her weight was 84 pounds, her temperature 99, and pulse 110, regular but weak. On examining the chest, the grating aortic bruit was very loud, and was heard all over the right mid-chest anteriorly. The tumor mass on the shoulder was definitely smaller, dry, and asymptomatic. A blood count on July 27 showed marked achromia and crenation, many pencil shaped erythrocytes and several nucleated red cells. The hemoglobin was 35 per cent, 5.2 mgms. per 100 c.c., with 2,310,000 erythrocytes, and apparently normal leukocytes. The patient was urged to have her blood typed together with her husband and sister, preparatory to transfusion. Two days later, however, she had several choking

was that of a poorly nourished person. The skin surface was studded with mushroom-like tumors of variable sizes which have been previously described. The lungs showed chronic passive congestion. The heart exhibited eccentric configuration with atrophy. The myocardium showed severe parenchymatous degeneration. The mitral valve was mildly sclerotic. The aortic valve showed a classical "button-hole" stenosis, the cusps having fused and calcified to a bony consistency. The valve opening had been reduced to about 1 by 3 mms. The aorta, distal to the stenosis, was dilated to about one and one-eighth times its normal size. The thyroid was smaller than normal and showed mild colloid retention. The cartilage and bone marrow showed hyperplasia. No cystic areas were found in the long bones. The liver, pancreas, and adrenals were smaller than normal and showed severe parenchymatous degeneration, and the kidneys showed grade 2 nephrosis with angio-sclerosis. No marked changes were found in the other organs. The four

parathyroids were studied in detail. A large number of vacuolated areas alternated with notable compactness of the cells. The capillary structures were not very conspicuous, and no colloid nor adipose tissue was found. The principal cells were conspicuous while the oxyphil cells were relatively insignificant. No parathyroid adenomatous changes were found. Stained sections of all of the above organs were reviewed by Dr. James E. Davis for the purpose of determining microscopic evidence of syphilis or of rheumatic infection. No such evidence could be found.

The post-mortem diagnoses were (1) generalized neurofibromatosis, (2) atrophy of the parathyroids, (3) generalized arteriosclerosis, (4) anemia, (5) generalized atrophy and degeneration of all the solid organs including the heart muscle, (6) advanced aortic stenosis with marked calcification.

Summary

A case is presented of multiple neurofibromatosis which showed no ascertainable familial history but a tendency to the transmission of ectodermal defects in each of two living children.

A study of the blood and spinal fluid calcium demonstrated definite variations from the normal.

X-rays of the skull, spine, thorax, long bones and pelvis showed (a) no demonstrable bone lesions like those found in osteitis fibrosa cystica, but (b) a characteristic box like outline of the sella turcica, and (c) an abnormality of the first portion of the ascending aorta, which at autopsy proved to be advanced aortic stenosis.

Conclusions

1. The change in the sella turcica, the history of tumor growth stimulation at puberty and pregnancy, the high blood serum calcium and spinal fluid calcium readings, the high basal metabolic rate in the absence of fever or infection, all point to an endocrine factor in the etiology of this form of von Recklinghausen's disease.

2. In this case post-mortem studies of the parathyroids could not be correlated, etiologically, with the clinical findings.

3. This was the only case with a coincidental aortic stenosis that the writer found in the recent literature. From the history, duration, and preceding findings, it is prob-

able that the change in the aorta was rheumatic in origin and developed at about the time the cutaneous changes occurred, i.e., at puberty. The study of this case does not reveal to what degree the abnormal calcium metabolism was responsible for the progressive calcification and consequent stenosis of the aortic valve which finally caused death.

4. X-ray therapy to a large pendulous mass on the patient's shoulder stopped its growth and its unpleasant odor and secretion. Whether the tendency of such a mass to sarcomatous degeneration would have been inhibited by the Roentgen rays, remains an unsolved question.

5. A study of the cases reported forces the conclusion that surgical removal of the larger tumor masses in this disease, predisposes to sarcomatous change in the scar or remaining tissue.

6. Studies of the calcium and phosphorus metabolism, and complete roentgenological examinations should be made upon every case of so-called von Recklinghausen's disease.

7. Finally, examination of the other members of the families of these patients, and of their children, will frequently detect immature or incomplete inherited cases, who should be protected as far as is possible against trauma and any but essential or emergency surgery.

References

1. Cannon: *Proceedings. Arch. Derm. and Syph.*, 18:605, 1928.
2. Cole and Driver: *Arch. Derm. and Syph.*, 18:938, 1928.
3. Diasio, F. A.: *Intern. Jour. Med. and Surg.*, 45:7:323-27, and *Urol. and Cut. Rev.*, 36:104-107, (Feb.) 1932.
5. Eloesser, J.: *Surg. Clin. N. Amer.*, 12: number 1-25.
5. Enokow, I.: *Zur Frage der Identitat von Adenoma sebaceum, Morbus Recklinghausen, und Fibromatosis subungualis.*
6. Ewing, James: *Neoplastic Diseases*. 3rd edition, pp. 163-167, 1928.
7. Feit, G.: *Arch. Derm. and Syph.*, 18:924, 1928.
8. Goldstein, I., and Wechsler, D.: *Arch. Ophth.*, 7:257-267, (Feb.) 1932.
9. Gordon, S.: *Can. Med. Assn. Jour.*, 27:524-25, (Nov.) 1932.
10. Hankey, G. T.: *Proc. Royal Soc. Med.*, 26:959-961, (June 23) 1933.
11. Hosoi, K.: *Arch. of Surg.*, 22:258.
12. Kass, I. H.: *Amer. Jour. Dis. Children*, 44:1040-47, (Nov.) 1932.
13. Kernohan, J. W., and Parker, H. L. J.: *Nerv. and Ment. Dis.*, 76:313, (Oct.) 1932.
14. Knapp, A. A.: *Jour. A. M. A.*, 100:494-95, (Feb. 18) 1933.
15. Morse, Plinn. F.: *Personal communication.*
16. Phillips, H. T., et al.: *W. Va. Med. Jour.*, 28:263-66, (June) 1932.
17. Wayson, J. T.: *Arch. Derm. and Syph.*, 27:421-23, (March) 1933.
18. Weiss: *Proceedings, Arch. Derm. and Syph.*, 18:467, 1928.
19. Wilder, H. H.: *Laryngoscope*. 42:5-365, (May) 1932.
20. Williams, R. Lester: *P. G. Med. Jour. of Britain*, 9:217, (June) 1933.

ACUTE CHOLECYSTITIS*

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In a clinical discussion of acute cholecystitis, as in other forms of cholecystitis, the clinician must bear in mind that he is treating the biliary tract. We interpret acute cholecystitis to include only those cases in which the patient's symptoms are no more than two days duration, and in which there is definite pain, local or referred.

It will be practically impossible to rule out sub-acute infections in which recently, within a week or ten days, there has been a history of cholecystitis, and also the acute exacerbations of chronic cholecystitis, usually associated with stones.

Diagnosis

In patients with acute cholecystitis the main symptom is pain and gas distress. This may be of a low grade type, or of a severe colicky character, depending usually upon the presence of calculus in biliary tract, and the size of the stone and its position in the gall bladder or ducts. It is obvious that the small sharp stones which find their way in the cystic, common or hepatic ducts cause severe pain, while a large rounded stone may cause very little pain or subjective symptoms. Fever may or may not be present, but usually a temperature of from 99 to 100 is found in early low grade infection, and from 100 to 104 or higher in the sudden attack accompanied with gall bladder distention.

The severe types of acute obstruction usually due to blocking of cystic duct, frequently have a chill, which occurs shortly after the pain, depending upon the severity of the infection. A chill or chilly sensation is of the utmost importance in history. We believe that patient with a chill which follows soon after his attack of pain should be considered seriously ill, and be carefully watched. Here it is that the most experienced medical care should be given, as in many such cases recovery will depend upon the treatment given. We believe that early operation should be performed when the pain continues for several hours in spite of treatment, or when muscular spasm increases. The type of pain as mentioned above may depend much upon the location and character of the stone, also as to whether the patient has been subjected to pre-

vious attacks of his symptoms. Patients, who present themselves for examination who have had repeated attacks, will often have a higher resistance to local infection in the biliary tract than those with acute primary infection with biliary obstruction.

In over 80 per cent of our acute cases of biliary tract disease, the pain radiates between the scapulæ or to the tip of the right or left scapula. In our experience pain which is apparently deeply seated in the back, and which remains constant for several hours, is associated with common duct obstruction or pancreatitis. In the most serious types of acute hemorrhagic pancreatitis, the pain in the scapular region may be as severe as in the abdomen. The type and character of the pain is important in different diagnosis. In coronary disease or myocardial disease, while the pain may be over the liver area, it is usually toward the median line, usually radiates to the chest or left arm and very seldom between the scapulæ.

In cases of perforated ulcer of duodenum or stomach there is usually a history of food distress after meals, relieved by alkalis or vomiting. While the history of the digestive disturbances of biliary tract infection usually follow well at the end of digestion, from four to six hours, and so often quantitative, while the food distress of ulcer is qualitative. The clinician must always remember that patients may have all three of the diseases at the same time, viz. acute or subacute cholecystitis, associated with pancreatitis, ulcer of stomach or duodenum and acute coronary thrombosis. High appendicitis will need to be considered in all diseases of the right upper quadrant. Appendicitis is found more frequently under forty years of age, however, while gall bladder infection

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and heart disease are found more frequently after forty. The habits of the patient, his occupation, weight, sleep and previous history are all of the utmost importance.

Vomiting may occur in all the above diseases, or the disease may exist in serious form without vomiting or nausea. The vomiting of appendicitis, in which the appendix is high in the right kidney fossa or under the liver, is not as common as when the appendix occupies its usual position, and invariably does not occur until the onset of peritonitis. The pain in appendicitis unaccompanied with peritonitis is never as severe as in biliary stone or coronary disease. In gall bladder disease, the vomiting usually occurs within one or two hours after the onset of pain, especially if accompanied with stone. We consider that vomiting which comes on or continues after a few hours, with gall bladder symptoms is evidence of increased infection. The vomiting of appendicitis even in severe forms usually does not occur for from six to eight hours after the onset of pain. The case of perforated ulcer and the cardiac case usually does not vomit. We have often stated one very important clinical observation—a perforated ulcer case cannot vomit and the cardiac case is afraid to vomit. We feel it is of the utmost importance to the patient to arrive at a correct diagnosis, and we should review a short but careful history of the patient, make a careful clinical examination, and not depend on laboratory data to make our diagnoses. We feel that once the diagnosis is made, then and not until then should we use the laboratory. The clinical examination should follow as soon as possible after the onset of severe symptoms, if the patient has presented himself before complications have arisen. Once the diagnosis has been made, all necessary laboratory work should be done, but the liver function test with dye should not be used in the presence of fever or jaundice.

For years, when there was any question of perforated ulcer of stomach, or duodenum, we advised that the patient on admission to the hospital, be taken directly to the X-Ray department for a flatplate study of the abdomen. In a sitting position, a flat plate will in the majority of cases show air under the right diaphragm if there is a perforated ulcer. At the same time with no

effort on the part of the patient, and very little on the part of the medical attendant, a plate may be made of the chest and of the abdomen. The size of the heart and any complicating disease of the chest, as right lobar pneumonia, may be ruled out, and a flat plate of the abdomen will note gaseous distention of the small bowel, if the patient has acute intestinal obstruction. The writer deplores the lack of use of this valuable diagnostic aid, and wishes to urge its early and constant use.

A complete blood count and Kahn, urinalysis and blood chemistry examinations should always be made routinely on every patient as a part of the examination, as they may reveal much to the experienced clinician. However, the most serious cases of acute gangrenous cholecystitis may have repeatedly normal or subnormal blood counts. Blood chemistry findings may be of great value in prognosis in the patient under discussion, but are not of much value in diagnosis. It will be best to remember that many patients with any of the above diseases may have normal blood counts. Also remember that coronary thrombosis may be accompanied with fever and leukocytosis, and a tender, swollen liver, but except in rare instances no muscular spasm.

The immediate history of time, exactly what happened at the onset of the present illness, what occurred, was the patient alarmed, friends alarmed, whose medical aid called and when, how did the patient appear when examined by the first physician, what did the physician do, when did the patient vomit, how much and character of vomitus, was a spasm or local rigidity noted at first examination, was it local or diffuse? The pulse rate, expression, disability, heart sounds indistinct or almost inaudible, these and many other factors are the evidence, which may often save the life of the patient by making a correct and early diagnosis. Did the patient receive a hypodermic injection for pain, was the pain relieved, and for how long? These are all important data. An early electrocardiograph should always be considered if there is the slightest indication for such, and when it can be taken it is an important part of the clinical record. Except for severe coronary thrombosis and peritonitis from large perforation of ulcer, morphine gr. $\frac{1}{4}$ will relieve the acute pain in these patients, but not so as a rule in the

cardiac case. Here it is that the surgeon should think medically, and why not have medical consultation? Here it is that the medical man should think surgically, as delay in proper treatment may result in the death of the patient.

It should be remembered that there is often an association of these diseases, especially coronary diseases and cholecystitis, acute and subacute. Every experienced surgeon has seen many cases with distended gall bladders, with auricular fibrillation and severe symptoms of myocardial disease. These patients never recover under medical treatment alone, but with surgical treatment of the obstruction of the biliary tract, and drainage of the infection, many patients completely recover. Many patients with definite acute cholecystitis are treated erroneously as cardiac cases, and have been refused operation on the basis of electrocardiograph evidence. We have at times operated upon patients with marked distention of gall bladder and pancreatitis, who seemed to be in acute cardiac crisis, who made a most astounding recovery.

Treatment

Except in the gravest emergency, a few hours of good medical treatment will assist the patient on his road to recovery.

In cardiac complications associated with acute or subacute gall bladder or biliary tract infection we rely upon morphine freely and slowly administered 10 per cent glucose intravenously, rather than upon cardiac stimulation. The use of the duodenal tube and its irrigation with hot salt solution will often relieve the stomach distention and the always present duodenitis, and is of marked preoperative benefit. The local use of heat, best offered in large hot packs over the liver and each kidney will assist in elimination. The experienced clinical surgeon by frequent visits to such sick patients may often save these desperately sick patients by early operation, which of course should be of the simplest character.

All such operations may easily be performed with local anesthesia after giving morphine. Here is no time or place for academic cholecystectomy or duct exploration, in these acutely and often desperately ill patients. Open the gall bladder, suture it to the peritoneum, and then if a large gall

stone can be removed from the cystic duct or the gall bladder in a moment or two, well and good, but if not, a tube of large caliber may be inserted for cholecystostomy. No sutures are used except to hold the tube in position. The wound is small and there will be no danger of evisceration. In patients in fair condition with acute gangrenous cholecystitis, or with perforations of the gall bladder, we like to peel out the mucosa of the gall bladder and drain the cystic duct. The same postoperative treatment may be given, which should start immediately.

Patients in bad condition should have their head and shoulders well elevated and placed in an oxygen tent. Every experienced clinical surgeon has actually saved the lives of patients by such a regime.

We object to the use of ice bags or other forms of treatment, or ice applied locally, because it masks the patients' symptoms, lowers their resistance, which is already at a low ebb, and perhaps most important of all anesthetizes the liver area, so that the clinical attendant has lost that most important of all data, muscular spasm.

The clinician can never have too much experience in handling patients with acute cholecystitis nor the surgeon too much surgical judgment at the time of operation. Patients whose symptoms do not improve a few hours after the onset with well established diagnosis should have surgical treatment, as a certain number will be found to have perforation of the gall bladder if neglected. Once peritonitis and pancreatitis, secondary as it usually is to cholecystitis, advances, the chance for recovery is not good. While it is true that most of bile peritonitis is local, bile is a great irritant and one should suspect a perforation when the local symptoms become rapidly increasing in severity. All of our cases of bile peritonitis had a very rapid pulse and very acute pain.

In a résumé of all gall bladder operations at Harper Hospital from January 1, 1930, to January 1, 1935, there were thirty-two cases classified as acute cholecystitis with average duration of symptoms of eight days before operation.

In a résumé of 1,600 operations on the biliary tract by Drs. Brooks, Clinton and Ashley from 1918 to 1935 inclusive there were 404 acute cases classified as follows:

Empyema of gall bladder.....	254
Gangrenous cholecystitis.....	158
Perforated gall bladders.....	22
Cases with marked hepatitis, cholangitis and pancreatitis	292
Cases of acute hemorrhagic pancreatitis	11
Cases with jaundice at time of opera- tion	54
Cases with stones.....	372
Cases without stones.....	32

The mortality rate in these 404 patients was forty-three or 10 per cent.

The mortality rate in 1,600 cases excluding acute, jaundiced and carcinoma cases was 1.7 per cent.

The risk of allowing patients to continue with definite gall bladder infection is to invite emergency and costly surgery.

SERPENT-EMBLEMS OF MEDICINE*

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Of all the emblems of medicine the serpent is unquestionably the oldest and most significant. From remotest times it has been associated, if not directly with healing or health, at least with certain concomitant attributes of medicine, such as power and prudence or wisdom. Thus Christ told his disciples⁶ to be "wise as serpents, and harmless as doves"; and Hebrew tradition has it⁵ that "the serpent was more subtle than any beast of the field." According to de Gubernatis⁴⁶ the serpent is still revered in India as a symbol of every branch of learning.

The more direct association of the serpent with medicine has been explained in many ways. These explanations are so numerous and varied that we will barely outline certain of the less involved of them. One is an astronomical explanation, based upon the fact that the pole star of the constellation of Draco, the serpent, was only one degree from the celestial pole in 2836 B. C.^{39,46} This is not a popular view by any means. Another of the less widely held views is given by Wake⁴⁸ who says that throughout the East in all ages the chief characteristic of the serpent has been its power over wind and rain; hence offerings were made to it in the spring and fall, the times of sowing and harvest—and later also in the time of epidemics and plagues, such as cholera.

A much more plausible thesis is the very ancient one based upon the ability of the snake to periodically shed and renew its skin. Knight³⁶ says that "the principle of life . . . was represented by the serpent;

which having the property of casting its skin, and apparently renewing its youth, was naturally adopted for that purpose . . . (It) is not only the constant attendant upon the guardian deities of health, but occasionally employed as an accessory (*sic*) symbol to almost every other god, to signify the general attribute of immortality." But he appends a footnote from classical Greek writings to the effect that a snake used to be placed alongside Æsculapius because it was known that a sick person in becoming well experiences the same rejuvenating process as does a snake when it casts off its old skin and becomes young again. This view is warmly supported by Sir James Frazier,^{17,18} the author of *The Golden Bough*. He cites the fact that a great many primitive peoples, such as the Zulus and the natives of Borneo, have been very deeply impressed by this analogue of skin-sloughing and rejuvenation or convalescence, so that it has been given a prominent place in their systems of magic and religion.

There are several other explanations, many of which could only be valid if the snake had begun to be associated with medicine at about the time of Æsculapius. There is ample evidence that this was not the case. The Egyptians, in the periodical processions held in honor of their various

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divinities, used to carry a pole or standard supporting an erect serpent wearing the double crown of Upper and Lower Egypt. Now Moses and his people must have been familiar with this figure and its significance,



Æsculapius with his serpent-staff.

and the use he made of a brass serpent-emblem, constructed during the journey with the Israelites in the Wilderness, is decidedly interesting. We are told that "Moses made a serpent of brass and put it upon a pole; and it came to pass, that if a serpent had bitten any man, when he beheld the serpent of brass, he lived."⁴ This took place four centuries before Æsculapius's time—yet already we find the serpent not only being worshipped, but actually being worshipped as a healing power. Wake⁴⁹ enumerates other Egyptian associations of the serpent with healing: e.g., the asp-crown worn by Isis, goddess of life and healing, and the serpent encircling the figure of Harpocrates (who has been identified with Æsculapius) on an old papyrus.

The entire subject of serpent-worship is far too extensive and involved a one to be entered into in a paper of this scope. Sozinsky discusses it comprehensively in his monograph on medical symbolism.⁴⁶ In summary we may say simply that the association of the serpent with medicine is a very ancient and very intimate one which appar-

ently began at various times, for various reasons, among various peoples.

Of the association of the serpent with the Greek god of medicine, Æsculapius, we may write at a little greater length. Much of our knowledge of this association is derived from statues of the god. The original one by Thrasymedes of Paros, which stood in the great temple of the god at Epidaurus, shows him seated, holding a staff in his right hand while his left rests on the head of a serpent. A dog lies at his feet. The statue in the Askleion of Pergamus shows him standing, holding in his right hand a staff entwined by a single serpent; and so does the statue now at Florence. Those in the Berlin Museum and at Herculaneum are similar to these except that the staff is held in the left hand. It is noteworthy that the staves in the first three of these statues are clearly for support in walking, and not meant to represent rods or wands of magic or authority. C. N. B. Camac⁹ has in his possession an Athenian coin, fairly reliably dated as of the third century B. C., which has on its reverse a short staff with a single serpent coiled about it and on its obverse the head of Æsculapius. Thus there can be no doubt but that the authentic emblem of the Greek medical divinity, Æsculapius, was a walking-stick or staff entwined by a single serpent.

How or why the snake became an attribute of Æsculapius we cannot be certain. It was not unnatural, of course, that an animal already used as an emblem of healing should become the attribute of the patron god of that art. Several legends, however, have grown up in explanation of this association. One of these relates that a snake came to Æsculapius bearing in its mouth a magic herb by means of which he was enabled to perform all sorts of medical miracles, even to the resuscitation of the dead; but his use of this power so alarmed Pluto, who feared that Hades would soon lack for inhabitants, that he requested Zeus to blast Æsculapius with a thunderbolt, which was forthwith done. Another legend tells that Æsculapius was at the bedside of his patient, Glaucus, when a serpent came into his tent and twined itself about his staff, imbuing him with wisdom and enabling him to effect a cure. This tale likewise attempts to account for the origin of the traditional emblem of the god. Naturally all such

stories as these were merely afterthoughts; but however the association of Æsculapius and his serpent began, it was by no means a purely academic or artistic one. A particular species of snake actually frequented the vicinity of all the Asklepiadæ in large numbers; they crawled freely in and out of the temples and even assisted in the proceedings there—probably primarily by virtue of their psychological effect upon the minds of the devout pilgrim-patients,⁵² but secondarily at least, according to many Greek and Roman writers, by actually licking the diseased parts of somnolent or lethargic patients. So distinct was the association of this species of serpent with the Æsculapian temples that it has actually been named *Coluber Æsculapii*. Cuvier¹¹ describes it as a comparatively small serpent, from three to five feet long and about as thick as a stout walking-stick. It is orange-brown above and straw-colored below. It climbs trees readily, and though it will fight if attacked, it is by nature docile and easily tamed. This same serpent, though it is indigenous to southern Europe, is found north of the Alps only around the sites of former temples and colonies of Roman origin.⁵²

A historic episode serves to illustrate the high esteem in which serpents were held by the citizens of Rome. In 293 and 292 B. C. a plague was beginning to menace the city of Rome. Consultations with the Delphic Oracle—or, according to Livy,³⁷ the Sibylline Books—informed the anxious priests that in order to avert disaster Æsculapius must be brought at once from Epidaurus. A mission was promptly sent out to ask this favor of the god. Ovid⁴¹ gives his reply:

*I come and leave my shrine.
This serpent view, that with ambitious play
My staff encircles: mark him every way;
His form (though larger, nobler) I'll assume,
And, changed as gods should be, bring aid to Rome.*

Having arrived at Rome, he was formally installed in a new temple on an island named for him, in the middle of the river Tiber. The island was remodelled with the aid of large blocks of marble into a ship, on the dilapidated prow of which may still be seen the traditional Æsculapian emblem—the staff with the single entwined serpent—cut into the stone. The pestilence ceased shortly after the ceremonies of installation: ample evidence of the efficacy of the measures recommended by the oracle!

The proper Æsculapian emblem is, as we have already stated, a rough wooden staff or cane of variable length, more or less loosely entwined by a serpent with its head uppermost. Clippingdale¹⁰ suggests that the roughness of the staff is meant to symbolize the roughness of a doctor's life; but be that as it may, it at least serves to show that the staff is a walking-stick and not a rod or wand. The significance of this point will be elucidated a little later. This serpent-staff has been employed at various times as an emblem not alone of a Grecian healing divinity, but of medicine generally. Thus it appears in the arms of several eminent English medical men, among them Sir Henry Halford, Sir Joseph Fayrer, Lord Lister, Sir James Simpson, Sir Joseph Savory, Sir Henry Thompson, Sir Thomas Barlow, and Sir William Bartlett Dalby. It is also in the arms of St. George's Hospital. The door of the building occupied by the offices of the Royal College of Physicians of Edinburgh has carved into each side of it "the rough club of Æsculapius (with one serpent)"¹⁷. The same emblem is used as the collar ornament of the Royal Army Medical Corps (of England) and of the medical units of the French and Mexican armies. The automobile license plate emblem of the American Medical Association has since 1912²⁶ borne the Æsculapian staff and serpent, as does the official lapel button of the same organization. The coat of arms of the Medical Department of the United States Army for many years bore the rough staff and single serpent of Æsculapius, though the staff looked rather warlike to have been used by a medical god. This coat of arms will be discussed at some length later on in connection with Dr. Fielding Garrison's views on medical symbolism.

In a general way, however, the familiar and popular emblem of medicine, especially on this side of the Atlantic, is not the Æsculapian staff and serpent, but the *caduceus*. This emblem is ordinarily depicted as a short, slender cylindrical wand, usually knobbed at its upper end, bearing two extended wings which are attached near its top, and symmetrically entwined by two small serpents whose heads, which are uppermost, stretch toward one another. Authentic variations from this conventional form consist in the omission of the wings, the addition of a second and smaller pair of

wings to the foot or the head of the rod, or both, or the surmounting of the rod by a dove or cock in lieu of wings. These variations are all rather uncommon; the one most often encountered is the simple omis-

son, as we shall see later on. An English curate, interested in the widespread medical use of the caduceus, questioned thirty-one physicians of his acquaintance; he found that twenty-nine of them believed the ca-



Mercury with caduceus and purse

sion of the wings. They are all supported by ancient precedent; they are not errors but simply differences of opinion or preference.

The caduceus has received wide sanction as an emblem of medicine. Like the Æsculapian staff, it appears in the coats of arms of several eminent English mediceos: Sir William Broadbent, Sir James Burrows, Sir Lauder Brunton, Sir Rickman Godlee, and Lord Ilkeston. William Harvey used as his stemma a rather questionable variant of it which Camac⁹ does not regard as a caduceus at all: a lighted candle supported by a hand and loosely and asymmetrically entwined by a pair of serpents. The mace or staff of the Royal College of Physicians of Edinburgh¹⁷ is entwined by two serpents and surmounted by a cock. At least one American pharmaceutical house (G. D. Searle & Co.) and three prominent firms of medical publishers (Churchill of London, Davis of Philadelphia, and Lea and Febiger of Philadelphia) employ the caduceus as their emblem. The seal of the United States Public Health Service bears the conventional caduceus superimposed upon an anchor. The new University Health Department building at New Haven has a caduceus on its front, and the facade of the recently erected Medical Chambers at 140 East 54th Street, New York, bears a wingless and somewhat stylized caduceus. Officers of the Medical Corps of the United States Army wear a caduceus on their uniform collar; the reason for this is discussed at length by Garri-



Gudea's libation vase.

son to be the symbol of their profession.⁴⁸ That popular and able writer, teacher and physician, Howard Haggard, not only assigns medical significance to the caduceus, but actually states that it is an attribute of Æsculapius. And so one could go on enumerating instances of the association of the caduceus with medicine, almost *ad infinitum*.

What basis is there for such general acceptance of the caduceus as a medical emblem? We have already eliminated as erroneous the notion that it is the authentic symbol of Greek medicine or of Æsculapius. What justification is there, then, for its continued medical use? Let us consider the history of the device. There are two quite separate and almost wholly incompatible theses of its origin: the Eastern (or Babylonian and Phenician) and the Grecian. Frothingham,²⁰ quoted and supported by Garrison,²² advances a highly plausible but not, I think, a wholly satisfactory version of the Babylonian thesis. This is predicated chiefly upon a figure depicted on a libation vase presented by King Gudea to Ningishzida, a Babylonian deity of fertilization, fruitfulness and spring, whose chief functions were to act as messenger of the mother Goddess Ishtar and to awaken life and vegetation in the springtime. This figure consists of a rod closely and symmetrically entwined by two serpents with their heads uppermost, and supported on each side by a beast which somewhat resembles a gryphon. Frothingham dates this vase at

3500 B. C., or about the time of the first Egyptian dynasty. He and Garrison both believe that Ningishzida is the prototype of the Greek Hermes and the Roman Mercury, whose characteristic emblem the caduceus was, and that the snake-emblem simply became transferred to these gods in a pre-Olympic culture in early Greece. The unmistakable similarity, not only between the two emblems, but also between the natures of the duties of the two gods (Ningishzida and Hermes) makes this hypothesis an extremely attractive one. But a serious objection to such a view lies in the fact that serpents did not appear on the Hermeian emblem at all until relatively late, when they were added apparently as a natural outgrowth or modification of the earlier form of the emblem, as we shall see.

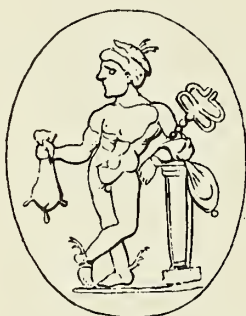
For the sake of clarity it should be stated here that the caduceus, as we and the Romans before us knew it, was derived both in form and in name from the Greek *kerykeion*, the derivation occurring through the Doric form of the word, which was spelled *karykeion*. The Roman emblem was the chief attribute of the god Mercury; the Greek, that of his prototype, Hermes. Thus the origins of the emblem may be traced in part at least through literary references to, and artistic depictions of, the god Hermes.

The word *kerykeion* was originally an adjective derived from the word *keryx*, a herald; and it was at first used in the phrase *kerykeion skeptron*, meaning loosely a herald's wand. Very early, however, the word *skeptron* was dropped from this phrase, and the word *kerykeion* alone used to mean the same thing. Boetzkes' suggests, reasonably enough, that this would seem to indicate that the emblem had been long-established, an attribute of heralds as a class. He cites a historic episode in support of this suggestion: the Athenians, a long time ago, were besieging a certain town when they heard that a nearby city was preparing to send reinforcements to raise the siege. They thereupon sent messengers to this city *aneu kerykeiou*—without the *kerykeion*—to indicate to the citizens that messengers from Athens had such friendly feeling toward them that no symbol of peaceful intent, or of their identity as messengers, was required. When an emblem is eloquent by virtue of its absence, its significance must cer-

tainly have been deeply rooted in the tradition of the times. Boetzkes goes on to describe in detail numerous ancient vases and works of art on which heralds are depicted bearing the *kerykeion*. It appears always as a wand or rod surmounted by an Arabic figure eight with an open top, and it is shown only in connection with heralds, and, later, with Hermes and sometimes Iris. Boetzkes observes in this fact the real reason why the *kerykeion* became associated with Hermes: he says that of course the emblem would only be given to a heavenly herald when such was the common practice on earth. Legendary explanations are necessarily merely afterthoughts; e.g., the story told by Wake, that Apollo gave Hermes a three-leaved rod entwined with fillets, or later with serpents, in exchange for the lyre. Boetzkes' arguments become even more cogent: he goes on to observe that other gods, when they happen to be functioning as heralds or guides, likewise bear the *kerykeion*; thus even Zeus, on an Ionic vase, is depicted with the herald's wand. And on a vase in Berlin Hermes is shown in three different situations: as an observer at the battle of Herakles, without a staff; as an observer at the pursuit of Troilus by Achilles, with a simple staff; and (with Iris) leading the goddesses to Ida, bearing a *kerykeion*. At a later date, however, the *kerykeion* had become so firmly associated with Hermes that he was almost invariably depicted with it, regardless of the situation in which he happened to be. Indeed he was often shown carrying it in situations in which it could only have hindered him: e.g., while carrying the infant Arkas on his left arm, or while forcing Paris, in the wrestling ring, to carry out Zeus' will. Thus, says Boetzkes, "the *kerykeion*, long before its first mention in the literature, was the vocational emblem of the heralds: and it served especially to characterize the guiding herald, who was so important to the old epics. This must have been the situation by 700 B. C."

The transition from this simple herald's wand, the *kerykeion*, to the more elaborate emblem seen as the emblem of Hermes in later times occurred rather gradually. The staff itself became roughened at its upper end (as may be seen in illustrations of a certain period) and then artists began to substitute a pair of entwined serpents to

represent this roughening and the open-topped figure eight above it. This change is accounted for, or may conceivably have been suggested to the artists, by the old legend which relates that Hermes, on finding



Hermes with kerykeion and purse
(350 B. C.).

two snakes in combat, pacified them by laying upon them the rod given him by his father, Apollo: they ceased fighting and entwined themselves about the rod in friendship. After the serpents had become firmly established as a part of the emblem, various artists began adding wings to the top of the staff, perhaps to suggest the concept of speed in association with the messenger-god. We do not find representations of the caduceus with wings until about 250 B. C.

This, then, is a second explanation of the beginnings of the caduceus. Rational as it is, we still cannot entirely disregard the effect of Egyptian, Phenician and Carthaginian symbols in the development of this peculiar and distinctive emblem. There are, moreover, other views of the problem which favor this side of the argument: e.g., Boettiger's assertion¹ that the caduceus was really of Phenician origin, the serpents having consisted originally of a knot, skilfully tied, with which the Phenician traders were wont to secure their wares. He explains that the knot came in the course of time to be attached to a bough with green leaves at the end, the whole forming a symbol of commerce. This view is supported by what we know of certain of the more important functions of Hermes, as we shall see. And it likewise explains the origin of the wings, as an artistic modification of the green leaves. In summary we must simply admit that the problem is not quite settled.

We have so far uncovered only a few of

the possible meanings that might be read into the caduceus, or *kerykeion*, when it is used as a symbol. Boetzkes has offered ample proof that it originally signified, in association with Hermes as formerly among mortals, the guiding function of a herald. Frothingham's Babylonian prototype of the emblem suggests that we should at least admit the possibility of an association with a god of life and reproduction; and Garrison has insisted, upon occasion; that "some of the functions of such a diety were indubitably medical." Boettiger's thesis suggests an association with trade and commerce in Hermes' emblem. But these three suggestions by no means exhaust the possibilities. Once the *kerykeion*, or caduceus, had become established as the emblem of Hermes, it really assumed the task of symbolizing all of his functions, which were numerous and varied. To list the more important of them: he was god of the wind and air, servant and messenger of Zeus and other gods, god of gymnastics and exercise, god of robbers, thieves and traitors, guide of souls to Hades, god of sleep and dreams, patron of fertility in plants and animals, god of luck, patron of commerce on both land and sea, custodian of games, and god of roads and of travellers. In addition to these, Pauly⁴³ discusses what he calls a minor aspect of Hermes: his activity as a doctor. As a god of fertility he could restore lost virility. He assisted Semele at the birth of Bacchus; he helped Athena restore Danaos' daughters to sanity; and by carrying a ram on his shoulders around the city of Tanagra he averted a plague there. In the Magic hymn he is appealed to as a god of healing. He has been associated with Hygeia, sometimes as her husband. Peiraieus's inscription refers to him as a physician. In Olbia he was petitioned on behalf of the peace and health of the citizens. He healed with certain plants, and sometimes used plants as poisons. He could put people to sleep with his wand. He was also worshipped in Boeotia as the averter of disease.⁵⁰

In addition to these various functions of the Greek Hermes which the caduceus might be supposed to symbolize, we must consider the significance of his Roman successor, Mercury. From the very beginning, in Latium, Mercury was almost invariably depicted with the winged caduceus. He frequently carried a full purse, which cer-

tainly suggests commercial rather than medical pursuits—and indeed, the Roman name for him has some significance in this connection. The Romans also emphasized another aspect of the symbolism of the caduceus; beside being the emblem of a god named for commercial pursuits (or for whom commercial pursuits were named!), it came to mean activities apart from the waging of war. When a man was sent out to parley with the enemy in time of war he bore aloft a caduceus in token of the peaceful, noncombatant nature of his mission, and was known as a *caduceator*. Here we see a harking back to one of the oldest uses of the emblem as described by Boetzkas, and here too is further confirmation of the Grecian thesis of its origin. Thus practically all the meanings that we might attach to the caduceus can be summed up into one; viz., that it symbolizes the peaceful conduction of business—the mercantile world as opposed to the military. So the use of the caduceus in connection with medicine is not only almost wholly unjustified, but is actually to be deplored, in view of the actual connotation of mercenary activities which it implies, and the many unsavory functions of the deity whose proper attribute it is—such as being the patron of thieves (and a great thief himself) and the conductor of souls to Hades. As Deonna¹² put it, “in antiquity neither the word caduceus nor the form of that emblem had (any) medical significance, nor was (either) *en rapport* with the gods proper to medicine; and to give to Æsculapius the caduceus of Mercury would have seemed heresy to a Greek or Roman.” He adds further that an ancient epigram describes a physician armed with a caduceus leading souls to the underworld in Hermes’ place! Agreement today is practically universal that as a medical emblem the caduceus should everywhere be replaced by the authentic and traditional emblem of the Greek patron god of medicine—the *rough staff* entwined by a *single serpent*.

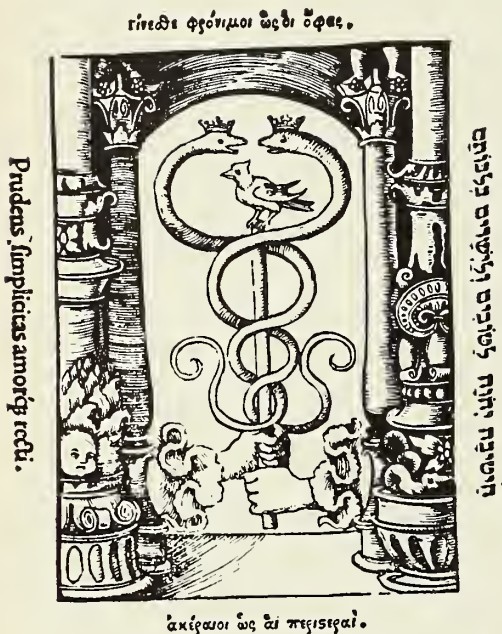
There has for several years been one notable dissenter in our midst. Dr. Fielding Garrison has asserted repeatedly that the caduceus had some medical significance before, and acquired more of such significance after, it became the emblem of Hermes. We have seen and examined all of the evidence on which he bases this assertion; but in

view of his reputation in the field of medical history, it would be well to examine his views a little more closely. His writing on this subject has all been prompted by the discussion of the use of medical emblems by the United States Army Medical Corps, and the army department of which it is a part. Garrison says that the coat of arms of the Medical Department, “which includes the nursing, dental, veterinary and civilian personnel,”²⁷ has included, since 1818, the Æsculapian staff, with a single serpent entwined. McCulloch refers to this as the coat of arms of the Medical Corps, and it is so designated in a colored reproduction of the arms and crest which he had prepared for publication³² in 1917. However, on the collars and chevrons of the officers and enlisted men of the Medical Corps of our army,²⁷ the caduceus is used, not, says Garrison, as a medical but as an administrative symbol, to signify the neutral, noncombatant status of this personnel on the field of battle. This of course is a perfectly legitimate use of the caduceus, in the light of the precedent established so long ago in the Roman army. But surely it would be more sensible to extend the use of the caduceus to the personnel of the entire Medical Department, medical and lay, and confine the use of the Æsculapian emblem to the collar ornaments of the medical officers themselves. That this occurred to Garrison is evident from the following quotations from a letter written a few weeks before his untimely death: “I have taken the above line” (*i.e.*, that the caduceus is used for its noncombatant significance) “because so many officious and idle-minded persons are always trying to have the collar ornament of our Medical Corps changed over to an Æsculapian staff, as in the British and Mexican armies. Our contention is that the caduceus not only differentiates our medical personnel from those of other armies, but that it is historically justified by usage. . . . When they press us too hard, I have taken the line that in the last analysis, Mercury had as many medical functions as any other major god. . . . Nevertheless, I have always agreed, with whatever authority or opponent, that the Æsculapian staff is the authentic symbol of Greek medicine.” So we can see that Garrison’s contention that the caduceus has medical significance has been largely dictated by the necessity, as it seemed to him,

of defending the *status quo* so far as its use in the United States Army Medical Corps was concerned.

Thus the last obstacle is removed. We must admit that the widespread present-day

attribute it was (except for its use in the Roman army) is found among early printers, who occasionally employed it—or something very like it—as their identifying trademark or emblem. Apparently the first of these men to use anything like the caduceus was Erhard Ratdolt, of Venice and Augsburg, who, in 1486, adopted as his emblem an intricate full-page figure in black and red which showed in part a naked boy holding in his outstretched right hand a pair of closely entwined snakes with their heads uppermost. Unfortunately we have no evidence suggesting what meaning Ratdolt might have attached to this, and there is nothing characteristic about his publications to enlighten us. John Froben of Basle was the next to use such an emblem. His version of it was a rather elaborate one, consisting principally of a staff held erect by two hands, entwined by two serpents (with crowns on their heads, showing them to be basilisks, a venomous variety of snake), and surmounted by a dove. This device appears in a quarto edition of Erasmus' *Enchiridion* of 1518 and in two more of Erasmus' works in 1519; it is shown in various forms in other books, the variations being confined to the number of hands shown. In a duodecimo edition of Sir Thomas More's *Utopia*, printed in 1518, the device is well shown, and about it are placed three inscriptions, in Greek, Latin, and Hebrew, respectively. The fact that this was very likely the first time Froben had used this emblem suggests that the inscriptions might have to do with his concept of its significance, or with his reasons for using it. Translated, the Latin inscription declares: "A prudent simplicity (or guilelessness) and a love of the right." The Hebrew translates: "God do good unto those that be good, and to them that are upright in their hearts." Unless the position of the staff is supposed to imply the quality of uprightness or righteousness the application of these quotations to the emblem is not particularly obvious; they appear merely to suggest the devout character of a respectable Swiss printer, such as Froben most decidedly was. The Greek inscription, however, appears to be far more apposite. It is taken from the Greek New Testament (Matthew 10, 16): "Be ye wise as serpents, and without guile as doves." I am very much inclined to believe that this injunction, appear-



BASILEAE APVD IOANNEM
FROBENIVM MENSEB
NOVEMBRI. M. D. XVIII.

Froben's emblem and mottoes.

use of the caduceus as a medical emblem is an error, wholly without justification in "mythologic tradition, literary documents, sculptural records or living evidences."⁵² We might rest content with this established fact; but another question is immediately suggested to our minds: What was the origin of this mistake? How did it come to be perpetrated, and by whom? Was it merely a confusion of form, the adoption of Mercury's emblem under the misapprehension that it was actually a legitimate variation of the conventional Æsculapian serpent-staff? An authoritative answer to these questions cannot really be made; the last one particularly offers serious difficulties to its solution, so intangible does such a factor as motive become with the passage of time. However, it is possible to make a little progress along these lines.

So far as is known today, the earliest use of the caduceus apart from the god whose

ing as it does in two parts, above and below the emblem proper, was intended to explain his use of the caduceus. This becomes the more likely when we consider that this form of the caduceus is distinctly unconventional; it is the earliest example we have of the substitution of a bird on the head of the staff for the usual pair of wings. Now authorities have repeatedly stressed the fact that Froben was a "medical printer," and that in his use of the caduceus is to be found the first use of that emblem in connection with medicine. But in a presumably complete list of his publications compiled by Hecke-thorn,³⁰ only one out of two hundred and fifty-six of his imprints—a folio edition of Plutarch's *Preservation of Good Health*—has any medical significance whatever. Even assuming this list to be incomplete, there are other reasons for believing that he was not a medical printer. In a day when important medical works were being printed in large numbers, the more important ones all came from printing houses in Austria, Germany and France; scarcely a medical book of that day bears the mark of *any* Basle printer. Moreover Froben, who was closely associated throughout his career with Erasmus, printed so large a proportion of religious, social and economic works that these characterized his publications as a whole. Thus even if he did print a few medical works, as Garrison insists,²⁷ he can hardly be regarded in the light of these facts as a "medical printer."

Other printers also saw in the caduceus a suitable device for incorporation into their identifying emblems. Jerome Froben, John Froben's son, continued his father's business after the latter's death and in at least one publication—Pliny the Younger's *Historia Mundi* of 1554—used his father's old emblem. John Herwagen, a friend of young Jerome, used a three-headed Hermes arising from the waist out of a short column and holding in his left hand a caduceus without wings. The fact that Herwagen recognized the caduceus as an attribute of Hermes, as is shown by this use of it, supports the belief that Froben senior was well aware that he had adopted as his emblem the caduceus and not merely a serpent-entwined staff symbolic of a passage in the Bible. Nearly fifty years later, Cervicornus used a conventional caduceus as his emblem, and a little later, Andreas Wechel of Frankfort

employed a caduceus with an extra pair of wings at its foot, superimposed on crossed cornucopias. Like Froben, however, none of these men printed medical works, or, so far as we know, attached any medical significance to the emblem. The caduceus as a medical emblem does *not* appear with Froben in 1518, as has so often been asserted.

But we cannot quite so readily excuse Froben from any participation in the origin of the medical use of the caduceus. A member of the College of Arms in London has found⁴² that there is a record of a crest "gyven to Mayster Doctor Buttes Fysshshyn unto your most Soverayn Lord King Henry the eyght in the xxiiiith yere ys rayng A^o 1533." This crest was added to the paternal Butts coat of arms, which consisted of an azure shield bearing a gold chevron decorated with three red diamonds and surrounded by three gold stars.^{13, 14, 42} The crest itself is described from a picture as a gold staff with a silver dove perched on its head, entwined by two blue serpents and encircled by a gold ducal coronet, and grasped at the foot by two hands issuing from gold, red and blue clouds. Aside from the color, the resemblance between this crest and Froben's emblem is far too striking to be mere coincidence. Even more significant circumstantial evidence of a connection between the two is to be found in the person of the famous artist, Hans Holbein. Holbein came to Basle from Augsburg in 1514 or 1515, and soon found employment with John Froben as an illustrator. His first title pages among Froben's works appeared in October, 1516. He then worked in Lucerne for over a year, from 1517 to 1519; then he returned to Basle and remained with Froben till 1526, when he went to England to paint the portrait of Henry VIII. In 1529 he returned to Basle, staying there three years and going back to London in 1532—just a year before the grant of the new crest. This is not especially significant in itself, but it becomes more interesting when we learn that Mrs. Butts' portrait was twice painted by Holbein. Altogether, it seems fairly evident that Holbein must have been instrumental in carrying to England the device he had designed for Froben's title pages fifteen years before. Who suggested it in connection with the grant of a crest to Henry's favored "fysshshyn" (who had then been

nine years in the service of the court), and why, we do not know. Nor can we be certain whether or not it was believed at that time to be symbolic of medicine—though there is evidence tending to show that it was probably *not* so regarded. The important point is that here for the first time a caduceus was being directly associated with the medical scion of a farming family; here in fact was precedent which even an intelligent person might well mistake for evidence that the caduceus had a medical connotation. Authorities in general are agreed that here (as a few years earlier with Froben) is to be found one of the earliest medical uses of the caduceus.

I do not believe that this is the case. Why the caduceus was granted to Dr. Butts, I do not know; but there is considerable evidence tending to show that neither at that time nor subsequently (until a grant to Sir George Burrows, in 1864) did the College of Heralds ascribe medical significance to Hermes' emblem; nor, in 1558, did Dr. John Caius do so, though numerous writers have accused him of that error. In an interesting little book entitled *The Mirrour of Maiestie* (London, 1618)²¹ there are reproduced line drawings of a number of coats of arms, of which three contain the caduceus. The first of these is one belonging to James I of England; it portrays a lion dispensing justice with one hand and wealth with the other, while a hand extending from a cloud above him holds over his head a conventional caduceus. The accompanying verse says in part: "Heav'n crownes my head with wisdom from above." The second, belonging to the Earl of Southampton, shows a composite figure whose right half is clad in full armor and holds a spear and shield, while the left is clad in doublet and hose, wearing a purse at its belt and a winged cap and shoes, and holds in its hand a winged caduceus. The verse below this says in part:

What coward Sticke, or blunt capitaine will
Dislike this Union, or not labor still
To reconcile the Arts and vistory?

The third plate shows the arms of the family Dell'Alciato, which include a caduceus winged only at its foot, but surmounted by a winged hat and superimposed on crossed cornucopias. The verse here is in early Italian; translated, it runs roughly

as follows: "Though it has appeared that the ignorant alone are exalted, it has never occurred that the good and learned man has been in want, or that virtue has been overcome by vice." Certainly the inference to be drawn from these three examples of the heraldic use of the caduceus is clear enough, whether they were authorized by the College of Arms or not. It was evidently regarded as a symbol of wisdom and learning, and not at all one of medicine or healing. This hypothesis is borne out by the shields and crests granted to many early English physicians; when a serpent was employed in them at all, it was always shown alone, and usually it was "nowed," *i.e.*, tied into a simple knot. There was only one exception to the singularity of the serpent in medical heraldry: a grant of 1568 to Richard Master, M.D., gave him a crest consisting of two serpents within a annulet set with a diamond.⁴² No caducei appear in British heraldry at all during the 17th and 18th centuries; but in 1819 a conventional caduceus was included in a grant to Joseph Cowper of Unthank in Skelton, Cumberland, who apparently was not a physician at all.⁴²

When the English physician Dr. John Caius (or Keyes, as he pronounced it and sometimes spelled it) revisited his old school, Gonville Hall, in March, 1558, he presented the institution with a silver caduceus. He had recently endowed the school, and this was the occasion of the changing of its name to Gonville and Caius College. This caduceus was in subsequent years always borne aloft by a beadle at all ceremonies held in the school. Much has been made of this fact by various writers, including Dr. Garrison, who would have it that the caduceus had already acquired medical connotations at this early date. All of these writers, however, though many have quoted Dr. Caius' speech of presentation (which was in Latin), appear to have misunderstood his remarks about the emblem. Here is what he says of it: "For the caduceus, or silver rod, means that one must rule more gently and kindly than the way they used to do who ruled with an iron rod. Moreover the serpents, signs of prudence, show that one must rule and act with prudence." It would appear from this that Caius himself, though he may have interpreted the traditional symbolism of the caduceus a trifle loosely, at least avoided making the error of which he

has been so widely accused; his discussion of the emblem certainly doesn't suggest that he thought it was associated with medicine.

The next use of the caduceus apart from Hermes or Mercury appears to have occurred at the University of Coimbra, in Portugal.⁴⁴ In 1697 Francisco Ferreira de Araujo painted on the ceiling of the University Chapel a decoration consisting of an elliptical wreath enclosing a vista of clouds on which was superimposed a stork, a pile of books, a *borla* or ancient academic cap, and a conventional caduceus. Similar paintings were subsequently placed on the ceiling and over the door of the old *Salle de l'examen privé*, the former bearing a wingless staff entwined by winged serpents and the inscription *Altissimus creavit de terra medicinam*, Eccles. 38. Early in the present century another similar decoration was placed on the ceiling of the Senate Room of the University, in which only the books, the stork and the caduceus figured. It is of more immediate interest to us, however, that in recent years (we do not know exactly when) the medical faculty of the University of Coimbra adopted as its special seal a copy of the original one of these decorative plaques, surrounded by the inscription *Universidade de Coimbra—Faculdade de Medicina*. Whether or not the caduceus was assigned medical significance by these various artists, we do not know, since the stork itself has been widely used as a medical symbol.

There seems to be somewhat less doubt, however, in the case of a statue carved for the University of Coimbra near the end of the 17th century by a French sculptor, Claude de Laprade. This statue is that of a young woman holding in her arms a caduceus, without wings, and an open book, and it bears the carved title *La Médecine*. In this instance we must believe that the sculptor intended the caduceus to symbolize the art of medicine, for neither the young woman nor the open book could possibly be taken for medical symbols. Thus although the evidence for it is purely presumptive, it seems likely that this is the earliest known example of the use of the caduceus as a distinctively medical emblem. Why Laprade made this error remains a mystery; perhaps he was familiar with Ferreira's ceiling-decoration and was misled by it; or perhaps he and Ferreira had access to the same mis-

leading source of information. At all events, here for the first time in history the caduceus was definitely and unmistakably linked with medicine as the distinctive symbol of that branch of learning.

The next medical use of the caduceus, according to most authorities, was on the title page of *Superstitions Connected With the History and Practice of Medicine and Surgery*, printed in 1844 by a medical publisher, John Churchill of London. The caduceus here appears enclosed in a double ovoid ring, beneath the words *Irrupta tenet copula*. This phrase is borrowed from Horace's Odes, and is part of a sentence which means "Thrice happy are they, whom an unbreakable bond unites." This motto of Churchill's, "whom an unbreakable bond unites," appears to refer directly to the serpents so securely entwined about the staff of the caduceus, for they are labelled, respectively (in Latin), *Medicine* and *Letters*. One is rather inclined to infer from this that Churchill used the caduceus here, not because he believed it to be a medical emblem, but because he felt that the serpents on it were symbolic of lasting and intimate union and so would clearly symbolize a union he wanted to see maintained, viz., that of medicine and letters. Again, however, as in the case of the Butts crest, the question of motive must be relegated to the background; we may attempt to absolve John Churchill of error in the matter, but here, as perhaps formerly in 1533, precedent is established. For a successful and prominent distinctively medical printer like Churchill to have adopted the caduceus as his emblem may easily have been an important factor in guaranteeing its general acceptance as a medical symbol. At all events, just a few years later (1856) the caduceus was adopted on the chevrons of the Hospital Stewards of the United States Army; in 1874 Sir George Burrows, physician, was granted a crest containing the caduceus; and from then on its misuse was assured. Of late years this misuse has been becoming relatively more and more prevalent, particularly in the United States; perhaps this can be attributed in part to the continuation of its use by our Army Medical Corps.

So the caduceus has become, by popular acclaim, our principal medical emblem. It seems a little strange that so gross and

obvious an error should prove so difficult to correct. Perhaps the chief reason for this is that it is so readily confused with the authentic Æsculapian serpent-staff—witness Haggard's definition of its symbolism. It certainly seems probable that this fact has encouraged the rapid growth of its popularity as a symbol of medicine. I cannot agree, however, for reasons already indicated, that this confusion explains its use by Froben, Butts and Churchill; I feel that the use of the caduceus by these three can be adequately explained on quite different and perfectly orthodox grounds. That their use of it has been *misunderstood* is entirely possible, particularly in the case of Churchill; and this may have given its misuse quite a bit of impetus. It is a little difficult to evaluate the significance and importance of the use of the caduceus in the seal of the medical faculty at Coimbra and in Laprade's statue; in the latter instance particularly one is compelled to admit that distinctly medical significance was given to the emblem. But when it is considered that this occurred nearly two hundred years before the caduceus began to enjoy any significant amount of popularity as a symbol of medicine, its use at Coimbra does not seem to have been a particularly important one so far as propagation of the error was concerned. Misunderstanding seems to have been the really vital element in the whole affair, from Froben to Butts to Churchill and so on up to our present day, when it is still going on. Speculative as this solution of the question is, it at least appears to elucidate (if not to simplify) the problem of the origin of the widespread error whereby the caduceus of Mercury and Hermes, emblem of peace, commerce and learning, has come so near to entirely supplanting the serpent-staff of Æsculapius, the only proper emblem of medicine.

Bibliography

1. Anthon, Charles: *Anthon's Classical Dictionary*. New York: Harper & Bros., 1841.
2. Bayley, Harold: *A New Light on the Renaissance*. London: J. M. Dent & Co., 1909.
3. Berjau, J. Ph.: *Printer's Marks*. London: E. Rascol, 1866.
4. The Holy Bible. Numbers 21:9.
5. Ibid. Genesis 3:1.
6. Ibid. St. Matthew 10:16.
7. Boetzkas, Reinhard: *Das Kerykeion*. Inaugural Dissertation, University of Munster, 1913.
8. Boigey: *On confond la caducée de Mercure et le baton serpenteaire d'Esculape*. Le Presse Médicale, annexes, p. 236 (9 février) 1924.
9. Camac, C. N. B.: *Imhotep to Harvey*. New York: Hoeber, 1931.
10. Clippingdale, S. D.: *Heraldry and Medicine*. The Antiquary, n.s. ii, 51:417-418, 1915.
11. Cuvier: *Animal Kingdom*, 9, 263.
12. Deonna, Waldemar: *Emblèmes Médicaux des Temps Modernes*. Revue Internat. de la Croix-Rouge, (Feb., Mar., Apr.) 1933.
13. Dictionary of National Biography, viii, 103. London: Smith, Elder & Co., 1886.
14. Edmondson, Joseph: *A Complete Body of Heraldry*, ii. London: Spilsbury, 1870.
15. Engle, Bernice: The use of Mercury's caduceus as a classical medical emblem. *Classical Jour.*, 25:204, 1929.
16. Fox-Davies, Arthur C.: *The Art of Heraldry*. London: T. C. & E. C. Jack, 1904.
17. Francis, W. W., Librarian of the Osler Library, McGill University, Montreal, Canada: Personal communication.
18. Frazer, Sir James G.: *The Serpent and the Tree of Life*. From Essays and Studies presented to Sir Wm. Ridgeway. Cambridge, University Press, 1913.
19. Ibid.: *The Serpent in Medicine*. Translation of the Fasti of Ovid, 2:130-132. London: MacMillan, 1929.
20. Frothingham, A. L.: *Am. Jour. Arch.*, 20:2:175-211, (Apr.-June) 1916.
21. G., H.: *The Mirror of Maiestie*. London, W. I., 1618. Photolith facsimile reprint. London: Trubner & Co., 1870.
22. Garrison, F. H.: The use of the caduceus in the insignia of the army medical officer. *Bull. M. Library A.*, 9:2, (Oct.) 1919.
23. Ibid.: The prehistory of the caduceus. *Jour. A. M. A.*, 72:20:1483, (May 17) 1919.
24. Ibid.: *Mil. Surgeon*, 44:633-634, 1919.
25. Ibid.: *Review of La Caducée au Cours des Ages*, by Louis Lenoury. *Mil. Surgeon*, 58:224, 1926.
26. Ibid.: A lucubration on the caduceus. *Mil. Surgeon*, 71:129-132, (Aug.) 1932.
27. Ibid.: Personal communication.
28. Gerhard, S. P.: The caduceus as a medical motor car emblem. *Jour. A. M. A.*, 72:17:1243-1244, (Apr. 26) 1919.
29. Haggard, Howard: *Devils, Drugs and Doctors*, pp. 15, 16. New York: Harper & Bros., 1929.
30. Heckethorn, Charles: *The Printers of Basle*. London: Unwin Bros., 1897.
31. Hellman, Florence S., Library of Congress, Washington, D. C.: Personal communication.
32. Hume, Edgar E., Librarian of the Army Medical Library, Washington, D. C.: Personal communication.
33. Hyginus, Poet. Astron., ii, 7.
34. Jayne, W. A.: *The Healing Gods of Civilization*, pp. 331-334. Yale University Press, 1925.
35. Johnson, Alfred F.: *The First Century of Printing at Basle*. London: Ernest Benn, 1926.
36. Knight, Richard P.: An inquiry into the symbolical language of ancient art and mythology, part i. *Class. Jour.*, 23:13, (Mar.-June) 1821.
37. Livy: x, 47.
38. Macrobius: Sat., i, 19.
39. McCulloch, C. C., Jr.: The coat of arms of the medical corps. *Mil. Surgeon*, 41:2:142-143, (Aug.) 1917.
40. Nichol, R. T.: Metropolitan Museum of Art, New York: Personal communication.
41. Ovid: *Metamorphosis*, xv.
42. Parsloe, Guy, Secretary and Librarian of the Institute of Historical Research, University of London, London, England: Personal communication.
43. Pauly-Wissowa: *Real-encyclopädie der classischen Altertumswissenschaft*. Stuttgart: J. B. Metzler, 1894.
44. Pessoa, Alberto: *Emblèmes et Figurations de la Médecine à l'Université de Coimbre*. *Aesculape*, 6:157, (June) 1935.
45. Roscher: *Ausführliches Lexikon der griechischen und römischen Mythologie*. Leipzig: B. G. Teubner, 1884.
46. Sozinsky, T. S.: *Medical Symbolism*. Philadelphia and London: F. A. Davis, 1891.
47. Thucydides: i, 53.
48. Tyson, Stuart L.: The caduceus. *Scientific Monthly*, 34: 492-498, (June) 1932.
49. Wake, C. Staniland: *Serpent-worship and other essays*. London: Redway, 1888.
50. Wilson, Robert: The caduceus and its symbolism. *Ann. Med. Hist.*, 4:3:301-304, (Sept.) 1922.
51. Wyllie, Robert: *Orders, Decorations and Insignia*. New York and London: Putnam, 1921.
52. Zwick, Karl G.: The origin and significance of the medical emblem. *Bull. Soc. Med. Hist. of Chicago*, 4:1:94-105, (Apr.) 1928.

THE JOURNAL

OF THE

Michigan State Medical Society

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MARCH, 1937

"Every man owes some of his time to the up-building of the profession to which he belongs."

—THEODORE ROOSEVELT.

EDITORIAL

COUNTY SOCIETY MEMBERSHIP

THE *Literary Digest* for January the thirtieth, contained an article on compulsory health insurance which was presumed to present the arguments on both sides of the subject. Those who read the article in question would agree that both sides of this controversial subject were presented, but in such a way as to favor the adoption of compulsory health insurance. The statement was made to the effect that two states in the Union had already gone on record as being favorable. What was meant, of course, was that organized medicine in each of these states favored it. An asterisk directed the reader's attention to the bottom of the page where, in a footnote, the names of the states were given. Members of the medical profession of this state must have been extremely surprised to read that one of the states was Michigan. If we can interpret the mind of organized

medicine in this state, our belief is that there is probably no other state in the Union which is more opposed, not only to compulsory health insurance, but to state or socialized medicine. There is a distinction among these three, though the result of the adoption of any one of them, so far as medical care is concerned, would be the same.

There never was a time in the history of American medicine when it was more necessary that every eligible member of the profession should be a member of his county medical society. As has been stated repeatedly, the county medical society is the democratic, the basic unit for organized medicine in this country. United we stand; divided we fall is a somewhat trite statement. It is, however, literally true. Whatever can be accomplished towards the advancement of medicine will be accomplished by organization rather than by a disunited profession. Organization in medicine protects the integrity of the profession rather than the economic feature of it. However, the latter is not to be despised. If the physician is to do his work efficiently, he must not be hampered by poverty. Such articles, as that mentioned above, or as those which appear from time to time in lay publications, call for activity on the part of the medical profession if it is to be saved from socialization, and all that it means.

A portion of the May number of this JOURNAL will be given over to the publication of the membership list of the Michigan State Medical Society. Become a member in good standing now, if you wish to be listed among those who are members of the organized medical profession. Do more than fulfill the requirements of the membership; if you know of any eligible physician or surgeon, who is not now a member, prevail upon him to join his county society. The professional man's first duty outside of his own home is to his professional society.

WHERE ORATORY SHOULD BE MATCHED

WHEN any effort is made to change the practice of any profession, medicine, dentistry or law for instance, the profession is put on the defensive. The advocate of change usually poses as an altruistic person seeking the good of the public as a whole. The profession attacked is

placed in the position of a self-seeker, a calling which places its personal interests above the public good. To the conscientious person, self defense is a disagreeable matter. One can speak on behalf of some one else, but when it comes to saying things in one's own favor, it becomes very difficult. We are leading up to the attempts on the part of certain so-called socially-minded persons to advocate measures which will in their opinion be advantageous to the population as a whole. The medical profession, to whom the public wants have been known intimately for decades, if not for centuries, feel they are in a better position to know what is best than the so-called socially minded advocate who has only recently appeared upon the scene.

Physicians have been too busy attending the sick to practice oratory in their own defense. The doctor has always been a doer and not a talker. He belongs to a great silent profession. Is it any wonder then, that he is scarcely a match for the glib-tongued exploiter who himself has nothing to lose and doubtless a position to gain if he can make it for himself between the physician and patient. In other words, the position he seeks is that of "manager" of the situation. It is high time that physicians, or at least selected members of the profession, became more forensic in their approach to the social and economic problems which are common to the public and his profession.

MENTAL HYGIENE

CONSIDERING the crowded condition of mental hospitals in the state, it is high time that mental hygiene should be accorded the same care and attention as hygiene is ordinarily accepted which pertains to the health of the body. It is time that the medical profession turn their attention to ministering to minds diseased. Instruction in mental hygiene should begin very early in life. Since so much depends upon heredity, it will be apparent at once that mental is a much more difficult subject than physical hygiene. One of the most recent standing committees of the Michigan State Medical Society is concerned with the subject of health of the mind. The members are Dr. Henry A. Luce of Detroit, chairman, Drs. E. H. Campbell, Newberry, M. H. Hoff-

mann, Detroit, C. F. Inch, Ypsilanti, and Theophile Raphael of Ann Arbor. Of the personnel of this committee, the chairman is a practicing physician; the other members are on the staffs of mental hospitals.

To begin with, the problem resolves itself into a sort of prophylactic against juvenile delinquency, the criminal with abnormal sex deviations, the socially maladjusted, and the problem child so-called, who in many cases has problem parents. This then is the beginning, and here the school and parents, as well as members of the medical profession, should coöperate. Intelligent coöperation presupposes a knowledge of the type and personalities of adolescence and youth. We hope that the members of the committee on mental hygiene will use this JOURNAL from time to time to clarify the problems for the medical profession.

Then there is a large number of people who live unhappy, not to say fruitless, lives, due to worry, fear, anxiety and maladjustment. This group includes many who try to improve their condition by consulting so-called psychologists, many of whom simply exploit those who listen to their lectures or who read their pseudo-scientific books. The word psychology has taken on a sort of dual meaning. Psychology, as taught in higher institutions of learning is truly scientific and disinterested in its search for truth. Psychology, as commonly understood by the layman, includes almost anything else that pertains to mentality.

A great deal can be done by persons such as doctors and teachers who possess the necessary training, wisdom and common sense to prevent incipient and borderline persons from progressing to the stage which requires special hospitalization with specialized physicians and nurses.

THE COMMON COLD

THE word "common" is usually the adjective preceding cold, when we have in mind the condition which affects the mucous membrane of the upper respiratory tract. Common as this condition is, at certain times of the year, very little is definitely known of the causative agent and not much has been accomplished beyond hygienic measures in the way of treatment. The common cold is not in itself such a serious

matter. Its seriousness consists of the fact that it may be the precursor of disease which may be very serious. The symptoms are well known. Shakespeare, who has put in very terse language so many things, describes the common cold together with the time of the year in which it is most common as follows:

"When all aloud the wind doth blow,
And coughing drowns the parson's saw,
And birds sit brooding in the snow,
And Marian's nose looks red and raw,
When roasted crabs hiss in the bowl,
Then nightly sings the staring owl,
Tu-who;
Tu-whit, tu-who—a merry note
While greasy Joan doth keel* the pot.

Quite frequently severe, steady winters of low temperature are more conducive to health than the open winter of rain and sleet with temperatures that oscillate about the freezing point. Weather conditions during January and February are doubtless accountable for the many influenza and pneumonia cases that have occurred. Every physician is acquainted with prophylactic measures which would lessen the instance of respiratory infections.

DR. AUGUSTUS W. CRANE

THE death of Dr. Crane of Kalamazoo has removed from the medical profession of the state and nation one of its most profound scholars, for Dr. Crane was widely known throughout the English-speaking world among the members of his own specialty. A clinician of exceptional ability, he excelled also in the field of research. He was the first to experiment with the x-rays, shortly after their discovery in 1895, when it was even necessary to devise much of his own apparatus. Doctor Crane was in the true sense a pioneer. Blessed with a rare scientific imagination, his written papers were masterpieces of English style. Dr. Crane was a true literary craftsman.

Immaculate in dress, with a well poised head, classic in appearance, he was an outstanding personality in any audience. He was a familiar figure at meetings of national associations of roentgenologists, and always commanded a respectful hearing when he arose to discuss a paper or to present his views. His spoken English was as polished

as his written papers, where his clarity of thought reflected itself in clarity of speech, reminding one of Carlyle's statement that language is the flesh-garment of thought. Not only did Dr. Crane excel in his own profession, he was also widely read and could speak with masterly precision on almost any topic that appealed to him. To use a rather common, nevertheless expressive, phrase, he was in the truest sense a "gentleman and a scholar." His relations with his fellow practitioners were always wholesome and cordial, so that his death is a distinct loss to all whose good fortune it was to know him.

As life runs on, the road grows strange,
With faces new, and near the end
Milestones into headstones change,
'Neath every one a friend.

THE MEDICAL HISTORY OF MICHIGAN

THERE are a number of the two volume sets of the Medical History of Michigan still unsold. If every doctor in Michigan should send in his order to the business office, 2020 Olds Tower Building, Lansing, fewer than one in ten could be accommodated. When exhausted, no more copies will be obtainable as the type has been remelted. It may be many generations before another similar work of the size will be written and compiled. The history is a monument to the untiring energy and erudition of the late Dr. Burr. Dr. Francis Packard, editor of the *Annals of Medical History* and author of a two volume work on *Medical History in the United States*, commenting on our *Michigan History*, writes:

"The history of medicine in Michigan has been fully written up in the *Medical History of Michigan* compiled and edited by a committee, C. B. Burr, M.D., chairman, and published under the auspices of the Michigan State Medical Society. This large work contains minute details of every phase of the subject."

The work was published in 1930. There are many young men who have entered practice in this state since the greater portion of the edition was sold out, who will want to procure a set before it is exhausted. It serves not only as a comprehensive work of reference, but as genuinely good reading as well. To those who did not know Dr. Burr, we would say that he was a man of scholarly attainments, a leader of national note in his specialty, psychiatry, and an author

*Cool.

in his own right. He had a fine sense of humor, readily recognized by those who read the chapters in the history written by the doctor himself. Dr. Burr had retired from active practice a number of years before the end. During this period, he worked wholly on the History. It is in reality his *magnum opus*.

Gold Diggers

Hae ye ever gan doon tae thae auld midnight clubs,
Where they spread silver trays aroon' for yer stubs,
Where th' lassies are dancin' on th' tip o' their toes
An' are nae overburdend wi' too many clothes.

Th' walls may be hung wi' paintin's in oil,
Some are just awfu' an' some are worth while;
On th' floor is th' ruins, and auld 'crepit maun
Tryin' tae dance wi' a lass. They've been drinkin',
ye ken.

Noo, Doctor, don't think ah'm a preachin' auld cad,
Or a ninny whose rhymin' auld brains hae gone
mad,
For ah ken that these lassies are chokin' wi' glee
'Boot dancin' wi' th' monied auld maun that ye see.

Ye hae heard o' th' maun whose leg hae been pu'ed
By women, an' men, whom we've thought rather
rude,
Bit this stunt hae run riot, in times sic as these,
An' th' auld 'crepit maun may no stem th' breeze.
WEELUM.

Interference With Radio Communication By Therapeutic Equipment

H. B. Williams, New York (*Journal A. M. A.*, Nov. 28, 1936), believes that many members of the medical profession will learn with surprise that they have been, unwittingly, responsible for broadcasting a great deal of disturbance of a particularly annoying type. The most prominent offenders in the medical armamentarium are the various medical and surgical diathermy machines, particularly the new short wave diathermy and artificial fever devices. Last winter important activities of the Naval Research Laboratory at Washington, D. C., were subjected to interference so serious as to stop the work completely. Eventually, after great trouble and expense, the disturbance was traced to therapeutic equipment. The first disturbing instrument located was a diathermy unit located in a hospital at Cambridge, Mass. This apparatus was found to have been so connected to the power supply line that the latter functioned as an antenna and enabled this small apparatus to broadcast a "sky wave" of considerable intensity. It is expected that the Council on Physical Therapy of the American Medical Association will presently alter its requirements for acceptance of electrical equipment such as is known to have caused interference. Manufacturers will be asked to submit evidence that the construction and installation specifications are such as to prevent interference. It is imperative that the medical profession and the manufacturers of electrical equipment for the profession take prompt steps to abate this nuisance, as otherwise it is certain that relief through legislation will be requested. This is liable to bring undesirable restrictions and will probably be entirely unnecessary if suitable action is initiated by the profession itself.

CURRENT EDITORIAL OPINION

Threats to Use the Scissors

(*The Nebraska State Medical Journal*)

We edit on the theory, no matter who the author, that his paper has no right to occupy more space or to use more words than necessary to state its facts and theories so as to be understandable to its readers. This is a busy world. Few of us get to do the slightest fraction of the things we'd like to do. The writer who uses an excessive number of words in putting over his message is a robber of his readers' time and a confrère's right to get his message into print. He robs also himself of prestige because his lengthy article has few readers as compared to those his shorter article would have. Paper and the labor of setting type are both expensive.

Off the Sidelines and Into the Game

(*The Ohio State Medical Journal*)

Upon glancing through the membership rolls of the State Association, one finds a considerable number of physicians of ability and influence who are not taking as active a part as they should in the activities of organized medicine . . . Most of those taking but a half-hearted interest, if any, in the affairs of organized medicine belong to two groups. One group comprises those who are content to let accommodating men with unusual energy and initiative shoulder the responsibilities of county and state organization activities as long as they can participate in the benefits accruing from the hard and earnest work of these volunteers. The second group is composed of physicians who are devoting so much time and effort to the affairs of special medical or scientific societies or groups that they have little opportunity or inclination to take part in the activities of their county medical society and the State Association.

Michigan Not Alone

(*New York State Journal of Medicine*)

"Who Wants Socialized or State Medicine?" The answers furnished to this question by the Michigan State Medical Society paint a revealing picture of the attempt of a few paid reformers and ambitious politicians to foist compulsory health insurance upon an unwilling nation. The situation in Michigan is in no major feature dissimilar from that in New York. Here as there, no spontaneous demand exists for a radical revision of the present system of private medical care. Such pressure as is exerted upon legislators comes from seekers after personal profit who see in compulsory health insurance an opportunity for jobs, financial gain, or political power.

The great majority of people have no serious complaint against the type of service they receive under the present system.

Poor Reception—Three deaf old gentlemen were in a railway carriage on the way to London.

The one nearest the carriage window looked out when the train came to a standstill.

"It's Wembley," he said.

The second man shook his head.

"No, it's Thursday," he replied.

"Thirsty?" said the third deaf man. "So am I. Let's all get out and have a drink."—*Quebec Chronicle-Telegraph*.

UNIVERSITY OF MICHIGAN POSTGRADUATE COURSES

The Department of Postgraduate Medicine of the University of Michigan Medical School, in conjunction with the Wayne University College of Medicine and the Michigan State Medical Society, announces the following short, intensive postgraduate courses:

UNIVERSITY HOSPITAL, ANN ARBOR

Electrocardiographic Diagnosis

(April 5-10, inclusive)

The teaching schedule of the course is divided equally between lectures, with lantern slide demonstrations, and the examination under supervision of electrocardiograms from the files of the laboratory. Each of the lectures is followed by the examination of curves. Professor Frank N. Wilson.

First Day

Morning. The scope of electrocardiographic diagnosis. The various types of electrocardiographs; design and operation; advantages and disadvantages. Demonstration of the string galvanometer and cathode ray oscillograph.

Afternoon. The specialized tissues of the heart; anatomy and physiology. The normal electrocardiogram; the R-R, QRS, and Q-T intervals and their significance. Size of the various deflections in standard leads. Einthoven's triangle.

Second Day

Morning. Sinus bradycardia, sinus tachycardia and sinus arrhythmia. Atrioventricular rhythm. Prolonged P-R interval. Partial and complete A-V block. Stokes-Adams attacks. Sino-auricular block.

Afternoon. Extrasystolic arrhythmia and paroxysmal tachycardia.

Third Day

Morning. Auricular fibrillation and auricular flutter. Effects produced by digitalis and quinidine.

Afternoon. Bundle branch block, dextrocardiogram and levocardiogram, precordial leads. The areas of the electrocardiographic deflections.

Fourth Day

Morning. Intraventricular block of minor grades; notching and slurring of the QRS deflections. Deflections of abnormally small and of abnormally large amplitude; axis deviation.

Afternoon. The T-deflection. Primary and secondary abnormalities of T. The significance of the area of T and of the area of QRST.

Fifth Day

Morning. Coronary occlusion. Animal experiments. Changes in the QRS and T-deflections of standard leads. Changes in QRS and T in precordial leads.

Afternoon. Examination of curves.

Sixth Day

Morning. Examination of curves.

While the course is intended primarily for physicians who have had some experience in electrocardiography, the subject will be completely covered and any physician who is interested may enroll. The fee is \$25.00, payable on application. If unable to attend, fee will be returned. Enrollment is limited.

Diseases of Metabolism

(April 12-16, inclusive)

In no field of medicine have advances taken place more rapidly than in nutrition. The fundamental researches are now bearing fruit in practical application to the patient. The number of patients with diabetes mellitus, hypertension, nephritis, and their attendant disorders is increasing. These considerations necessitate a periodic review by the practicing physician who is rendering the best service to his patients.

In this five-day course for qualified physicians the practical management of metabolic diseases is presented. The program illustrates the scope of the course. Demonstrations will be given of management of individual patients, of preparation of diets, and informal discussions will be held after each subject has been presented. In order that a thorough working knowledge of these important problems be acquired, all who can are invited to remain during the following week to observe the actual management of the large number of patients suffering from the diseases dealt with in this course, and to take part in the routine management in the clinic. Professor L. H. Newburgh, and Associates.

First Day

Morning. Review of fundamentals of metabolism. Metabolic mixture.

Afternoon. Classification of renal disease. The nature of renal function. Tests of renal efficiency. Informal discussion.

Second Day

Morning. Metabolism in diabetes. Principles of treatment. Hypoglycemia. Its clinical features and underlying pathology.

Afternoon. The criteria of the normal diet in adults and children. In pregnancy and lactation. Informal discussion.

Third Day

Morning. Clinical treatment of diabetes, including coma. Dietetics aspects. Indications and use of various preparations of insulin.

Afternoon. Calculation of diets. The translation of the dietetic prescription into menus. Informal discussion.

Fourth Day

Morning. The nature and treatment of obesity. The causes of the condition and the associated pathological changes. Its successful management.

Afternoon. Preparation of diabetic diets and the teaching of patients. Informal discussion.

Fifth Day

Morning. (a) The nature of edema. The recognition of the types of edema. Ways of ridding the patient of edema and a plan for the prevention of its recurrence. The importance of diet, water and acid. (b) The general management of renal insufficiency. Selection of diets, dependent on type of pathology. Water requirements and the therapeutic use of high intakes.

Afternoon. Preparation of nephritic diets. Selec-

tion of foods in order to fill dietary prescription. Informal discussion.

Enrollment is limited. The fee for the course is \$10.00, payable on application. If unable to attend, fee will be returned.

Ophthalmology and Otolaryngology

(April 26-May 1, inclusive)

The annual postgraduate course in Ophthalmology and Otolaryngology is arranged for those physicians who are especially interested in these fields. It includes a review of fundamental principles through lectures, demonstrations and operative procedures by physicians of national prominence, as well as opportunity to observe the application of modern developments in these specialties.

The course is not designed to prepare practitioners for specialization but to give to those who are prepared to practice Ophthalmology and Otolaryngology a new point of view and a new impetus for further study and investigation, and to offer to all in attendance the benefit of the experience of others in the subjects covered.

The first three days of the course will be devoted to Otolaryngology, under the direction of Professor A. C. Furstenberg, and the last three to Ophthalmology, under the direction of Associate Professor F. Bruce Fralick.

Guest Lecturers

Otolaryngology.—Dean M. Lierle, M.D., Iowa City, Iowa; Horace Newhart, M.D., Minneapolis, Minn.; James A. Babbitt, M.D., Philadelphia, Pa.

Ophthalmology.—Theo. E. Obrig, A.B., New York; Robert von der Heydt, M.D., Chicago; Henry P. Wagener, M.D., Rochester, Minn.; Walter I. Lillie, M.D., Philadelphia, Pa.

Enrollment is limited. The fee for the course is \$25.00, or \$15.00 for either division, payable on application. If unable to attend, fee will be returned.

Diseases of the Blood and Blood-Forming Organs

(April 8-May 27. Thursday, 2:00-4:30 P. M. Associate Professor Raphael Isaacs)

At each session it is planned to take one or more patients showing certain features of blood diseases, as anemia, leukemia, defect in the blood clotting mechanism, et cetera, and study the history, physical condition and the blood. This will give an opportunity to review the significance of some of the laboratory aids as blood counts, reticulocyte counts, cell measurements, corpuscle volume, the various indexes, criteria of cell maturity and immaturity, oxidase reaction, sedimentation rate, fragility of red blood cells, changes in infection, cell changes as indicators of prognosis, clotting time, bleeding time, prothrombin time, calcium time, icterus index and blood bilirubin. The newer methods of treatment will be demonstrated.

The eight sessions will cover the following conditions, but the order will depend on the material available.

1. Anemia—Iron deficiency types; hemolytic types.
2. Anemia—Pernicious anemia type.
3. Anemia—Aplastic and hypoplastic; pregnancy; syphilis.
4. Leukemia.
5. Infection—Agranulocytosis; polycythemia.
6. Hemophilia and purpura.
7. Lymphoblastoma.
8. Types of splenomegaly.

The course is offered to qualified physicians who are interested in hematology. The fee is \$5.00, payable on application. If unable to attend, fee will be returned. Enrollment is limited.

Surgery

(April 1-May 20. Thursday, 3:00-5:00 P. M.)

This course consists of a series of diagnostic clinics in the various fields of surgery. Clinical material will be used throughout to demonstrate the newer methods of treatment in each subject. The course should meet the needs of the surgeon and the practitioner of medicine for a review of the principles and practice of surgery. Professor Fredk. A. Collier and Associates.

Eight clinics on the following subjects will be given:

1. Cancer. A review of common lesions with emphasis on early diagnostic signs and treatment.
2. (a) Newer developments in treatment of fractures of the hip.
(b) Shoulder disabilities.
3. (a) The treatment of infections.
(b) Ulcers of the leg and their treatment.
4. (a) Appendicitis.
(b) Intestinal obstructions.
5. (a) Urinary tract infections. Etiology, pathology, symptoms, signs and treatment.
(b) Malignancy of the genito-urinary tract, recognition, differential diagnosis and treatment.
6. Management of acute cranio-cerebral and spinal injuries.
7. Backache. Methods of examination, significant signs and symptoms, x-ray interpretations. Conclusions as to treatment.
8. Empyema. Treatment of its various phases. Management of abscesses of the lung.

Enrollment is limited. The fee for the course is \$5.00, payable on application. If unable to attend, fee will be returned.

Medical Roentgenology. Advanced Course

(June 28-August 6. Monday, Wednesday, Friday, 1:30-4:30 P. M.)

The first half of this course consists of an intensive systematic laboratory study of the physical principles of x-ray production, the mechanics of x-ray apparatus, and the chemistry of photography. The second half will be devoted to instruction in film-interpretation, fluoroscopic procedures, and the therapeutic use of x-rays as well as radium.

Class limited to twelve students. Juniors and seniors in the Medical School and graduates in medicine eligible. Professor Fred J. Hodges, Assistant Professor W. S. Peck, and assistants.

Laboratory Technic. Clinical Microscopy

(June 28-August 20. Monday, Wednesday, Friday, 8:00-12:00 A. M.)

This course is the same as that given to the sophomore medical students during the regular year. It may be taken by students who wish credit or by technicians who desire training in laboratory methods of diagnosis. The work consists of a study of urine, sputum, stomach contents, feces, exudates, transudates, spinal fluid, agglutination reactions, including the study of iso-agglutinins in relation to blood transfusions. A considerable part of the course is spent in the study of blood and blood dis-

eases. As the course advances the student is taught the diagnostic significance of the technical procedures which he is acquiring. Non-medical students who desire to take this course must take it in the Summer Session. Associate Professor Herman H. Riecker.

Summer Session Courses

(June 28–August 20)

Instruction in the clinical branches is available to qualified physicians during the summer school session. Registration may be either four or eight weeks. A full schedule of organized teaching is arranged to meet individual needs. Registration fee \$39.00 for eight weeks period.

HENRY FORD AND CHILDREN'S HOSPITALS, DETROIT

Pediatrics

(April 19, 20 and 21)

The course in pediatrics and contagious diseases is given under the direction of the American Academy of Pediatrics. It consists of lectures and clinics on those conditions in infancy and childhood which contribute prominently to mortality and disability, particularly those whose management has been facilitated by recent contributions. Committee for the Academy: Thomas B. Cooley, M.D., David J. Levy, M.D., Edgar Martner, M.D., Joseph A. Johnston, M.D., Chairman.

First Day

Morning

- (a) Abnormalities of the newborn period.
- (b) Clinics: Use of estrogenic substance in the treatment of vaginitis in children; some therapeutic effects of thyroid in the growth period; treatment of undescended testes.
- (c) Regulation of body fluids.

Afternoon

- (a) Convulsive disorders in childhood.
- (b) Clinics: Tetany in the newborn; cerebral hemorrhage in the newborn; the question of drainage.
- (c) Feeding in infancy and childhood.

Second Day

Morning

- (a) Current practice in prophylaxis and treatment of the contagious diseases.
- (b) Clinics: Management of squint in children; urological disorders; acute rheumatic fever; treatment.
- (c) Therapeutics of infections of the nose, throat and ear.

Afternoon

- (a) Behavior problems in childhood.
- (b) Clinics: Rickets; comparison of anti-rachitic agents; scurvy—observations on sub-clinical states.
- (c) Common orthopedic disorders in childhood.

Third Day

Morning

- (a) Diarrheal diseases of infancy.
- (b) Clinics: Indications for encephalography; protamine insulin; nephritis in childhood; treatment.
- (c) Physical appraisal of the child from the standpoint of the school examiner.

Afternoon

- (a) Diseases of the blood.

- (b) Clinics: Pneumonia, therapy of childhood tuberculosis, significance of.
- (c) The differential diagnosis of lesions causing abdominal pain.

Evening

8:30 o'clock.

A cordial invitation is extended to all who are attending the course to be present at the April meeting of the Detroit Pediatrics Society, Wayne County Medical Society Building, 4421 Woodward Avenue.

As this program is a contribution of the Academy, no registration fee is charged. Enrollment is limited.

RECEIVING HOSPITAL, DETROIT

Proctology

(April 26, 27 and 28)

The following outline of a short, intensive course in Proctology is arranged for physicians who wish to become more familiar with an important and often neglected field of practice. In accordance with sound teaching in special fields, the subjects are arranged to emphasize the application of the fundamental sciences to proctology and the relation of the latter to the body as a whole. The common conditions will be studied thoroughly by means of abundant clinical material presented for diagnosis and treatment.

First Half: Associate Professor Edward G. Martin, Assistant Professor H. I. Kallet, and Associates.

Second Half: Professor Louis J. Hirschman, Associate Professor John J. Corbett, and Dr. Jesse T. Harper.

First Day

Morning. Embryology, applied anatomy, and physiology of anus, rectum and colon, with a general consideration of ano-rectal diseases. Hemorrhoids, fissures, etc. Prolapse of the rectum.

Afternoon. Colitis. Lymphopathia venerea; stricture. Pruritus ani.

Second Day

Morning. Cancer with especial reference to diagnosis. Anesthesia. Diagnostic and operative clinic.

Afternoon. Constipation, obstipation and fecal impaction. Cryptitis, papillitis and polyposis; focal infection from the proctologic standpoint. Foreign bodies in the anus and rectum; injuries of the anus and rectum; the proctologic affections of infancy and childhood.

Third Day

Morning. Abscess and fistula of the ano-rectal region. Demonstration of clinical cases.

Afternoon. Demonstration of technic of office treatment of diseases of the anus, anal canal and rectum.

This course is followed immediately by a three-day course in Diseases of Genito-urinary Tract. Registration for either course is \$10.00, or \$15.00 for both, payable on application. Enrollment is limited.

Diseases of the Genito-Urinary Tract

(April 29, 30, May 1)

This course emphasizes the diagnosis of common disorders of the genito-urinary tract. It is designed for physicians who wish to become familiar with this field of practice. In accordance with sound teaching in special fields, the subjects are arranged to emphasize the application of the funda-

mental sciences to disease of the genito-urinary tract, and the relation of the latter to the body as a whole. The common conditions will be studied thoroughly by means of abundant clinical material presented for diagnosis and treatment. Associate Professor Fred H. Cole, and Associates.

First Day

Morning. Urology in children. Clinical demonstration of urological diagnosis.

Afternoon. Demonstration of office methods in urology. Acute and chronic gonorrhea and its complications. What the general practitioner should know regarding cystoscopic diagnosis, functional tests and x-ray investigation in diseases of the genito-urinary tract.

Second Day

Morning. Operative work. Pus in the urine; where it comes from and what it means. Causes and significance of blood in the urine. Malignancies of the genito-urinary tract.

Afternoon. Obstruction at the neck of the bladder. Types. Complications in kidneys and bladder. Medical and surgical treatment of the vesical neck. Obstruction with special reference to the prostate. Drugs and diets in urogenital diseases.

Third Day

Morning. Operative work. Diseases of the kidney with differential diagnosis. Diseases of the bladder.

Afternoon. Tuberculosis of the urinary tract. Calculus of the urinary tract. Diseases of the penis, urethra, scrotum and scrotal contents.

This course is preceded by the three-day course in Proctology. Registration for either course is \$10.00, or \$15.00 for both, payable on application. If unable to attend, fee will be returned. Enrollment is limited.

Gynecology, Obstetrics and Gynecological Pathology

(May 3-7, inclusive)

The following advanced course offers a thorough review of the basic principles of modern obstetrics, those involved in caring for injuries common to childbearing, and the pathological changes incident thereto. While the program is arranged for those already interested in this field, the subjects are chosen and presented in a manner to be of value in the everyday practice of Medicine. The abundant clinical and pathological material of the Receiving Hospital will be utilized. Professor Ward F. Seeley, Professor James E. Davis, and Associates.

First Day

Morning. Hyperemesis gravidarum. Obstetric analgesia and anesthesia. Asphyxia of the newborn.

Afternoon. The pathology of puerperal infection. Dysmenorrhea. Birth injuries and their end results.

Second Day

Morning. Diagnosis and treatment of gonorrhoeal pelvic inflammation. Non-malignant ovarian cysts. The indications and contra-indications for version and extraction.

Afternoon. Malignancy of the ovary. The factors concerned in sterility. Low and mix-forcep operations.

Third Day

Morning. Gynecological clinic.

Afternoon. What can be done for carcinoma of the uterus with radium and x-ray? Toxemias of late pregnancy. Placenta previa.

Fourth Day

Morning. Newborn problems during the first month. The management of posterior positions. Vaginal discharge (non-malignant).

Afternoon. The pathology of gonorrhoeal infection in the female. Rupture of the pregnant uterus. Indications and methods for therapeutic abortion.

Fifth Day

Morning. Gynecological Clinic.

Afternoon. Hereditary and environmental influences in pathology. Office practices in gynecology. General systemic diseases complicating pregnancy.

The fee for the course is \$15.00, payable on application. If unable to attend, fee will be returned. Enrollment is limited.

RECEIVING AND HERMAN KIEFER HOSPITALS, DETROIT

General Medicine

(May 10-14, inclusive)

This program is the ninth of a series of annual intensive courses directed especially to problems of general medical and surgical practice. The five-day course will include subjects presented in the 1936 fall extra-mural teaching program, using direct bedside teaching methods. The course offers an opportunity to the physician to become acquainted with the progress of medical science in all fields rather than as a brief reminder of older practices. The continuing progression of the programs through five years makes it possible to deal more thoroughly with each subject than in the usual refresher course. Special attention is called to the teaching period in communicable diseases at the Herman Kiefer Hospital.

Physicians attending the course are presented with the second volume of the Michigan Postgraduate Series.

First Day

Morning. Acute lobar pneumonia. A discussion of specific methods of treatment. A consideration of sera and vaccines. Recognition of complications. Empyema.

Afternoon. Appendicitis. A consideration of the problems involved in the increasing death rate from appendicitis. Differential diagnosis of diseases of the breast.

Second Day

Morning. The diagnosis and practical management of the more common diseases and injuries to the eye. The conjunctiva. Squint. Foreign bodies. Glaucoma. Recognition and management of acute and chronic diseases of the ear.

Afternoon. Fungus and allied infections of skin. Tinea infections. Tricophytids, tinea versicolor, arthrasma, blastomycosis, coccidioid granuloma, et cetera. Allergic diseases

(a) The skin in immunity and allergy.

(b) The common skin manifestations of allergy.

Third Day

Morning. Malpositions of the uterus. The importance of clinical manifestations. Diagnosis and treatment. Management of post-partum infection. Diagnosis of mild cases. Courses of the infection, prognosis, prevention and treatment.

Afternoon. The differential diagnosis and management of coronary disease. Progressive coronary

(Continued on page 178)

President's Page

MEDICAL LEADERSHIP

SIR WILLIAM OSLER, one of the world's greatest medical writers, is credited with fanning into flame the spark that many a man did not realize was in him. This physician developed his latent ability and became a medical leader, heard throughout the world.


Many a doctor of medicine of the present day has latent abilities; these men need only the application of a "fan" to make them interesting and aggressive leaders. The time has arrived when the medical men of America must assert themselves and acquaint the people with the true facts of their profession. The public is learning much about medical practice and the profession but the plurality of information is of a biased and shaded nature which tells only half-truths not complimentary to medical men and women. The altruism of our professional people deserves a better vote of thanks than that!

Magazines and newspapers of national scope are publishing articles weekly and monthly which are giving our lay readers distorted and false impressions of medical subjects and activities. Perhaps these are inspired by our opponents who are ever on the alert, constantly contacting lay groups, giving only part of the story on such matters as socialized medicine, medical service to all groups especially those in the subsistence level and those employed with modest incomes.

If the public develops an antagonistic viewpoint toward the medical profession, it can hardly be blamed because it is hearing but one side of an important question. The medical viewpoint is not heard, mainly because the physician himself, who is the only one qualified to tell the story, is too modest to "toot his own horn."

Hiding our light under a bushel is to no avail and contrary to modern trends. You medical men and women are or should be leaders in your communities. Like Dr. Osler, you must encourage the spark of medical leadership and bring the message of medicine to your public—to service clubs, women's organizations, Parent-Teacher organizations, etc. Doctor, arrange to speak to these groups on subjects pertaining to medicine; for example, know the facts and spread your knowledge concerning the perils of any socialized medicine scheme in America. Many of you will say that you cannot talk in public. Neither can I, *but I do*.

Carry the torch in behalf of good medical service which tolerates no deterioration. No one else will do it for you. Let us have a thousand Osler's in this state, fifty thousand in the nation. You must be heard across the land. Medical leaders, assert yourselves NOW!



President of the Michigan
State Medical Society



The following is the third of a series of brief articles on the business side of a physician's practice. They offer pithy suggestions and aids to enable the doctor to master, with more ease, a phase of his daily work which is often distasteful but always necessary.

WHAT YOU OWE AND WHAT YOU OWN

HENRY C. BLACK and ALLISON E. SKAGGS

THE doctor usually gives more attention to what he owes than what he owns, because any creditors usually remind him at regular intervals of his obligations to them when possibly he has forgotten the amounts he has invested in property, such as his home, office equipment, car, et cetera. A discussion of assets and liabilities need not necessarily bring to mind the complicated financial report of some large corporation, but can refer to a simple listing of "What You Own" (Assets) and "What You Owe" (Liabilities). Some form of income and expense records has become almost universal due to the necessity of having figures for income tax reports, and it is but a step further to list values owned and obligations. Such a listing of assets and liabilities can be itemized very simply with such general headings as these:

What You Own

1. Cash and Bank Account
2. Investments (Itemized)
3. Automobile
4. Furnishings and Equipment
5. Books and Instruments
6. Real Estate

What You Owe

1. Unpaid Bills
2. Notes Payable
3. Mortgages

Naturally the difference between the totals of the two columns is the net worth of the doctor. Keeping such lists up to date by monthly recording of the additions and reductions requires more thought or advice but is immeasurably superior to the more customary method and is not necessarily complicated.

Contrast such a record with the common practice of laboriously bringing forth, probably from the previous year's income tax blanks, the cost of car, office furnishings, equipment, instruments, etc., dusting them off, revising them, and finally with a sigh storing them away until another March 15

requires their use. When such sketchy records are the only ones available is it any wonder that administrators often run into difficulties when a doctor's estate must be settled?

Good management of funds is, if anything, more difficult than obtaining them, and the doctor can usually improve his own business judgment by constantly having the whole financial picture before him. Only by so doing can intelligent management be applied to the financial problems of practicing medicine.

UNIVERSITY OF MICHIGAN POSTGRADUATE COURSES

(Continued from page 176)

occlusion. Angina pectoris. Case presentations. Clinical pathological conference. Clinical course and pathology of circulatory disease.

Fourth Day

Morning. Care of the injured person, including the recognition and emergency care of shock, hemorrhage, wounds and fractures. Case presentations of fractures.

Afternoon. Clinical methods of diagnosis of ulcerative lesions of gastro-intestinal tract, including stomach, duodenum and colon. Newer methods of treatment. Diagnosis of diseases of colon.

Fifth Day

Morning. Urinary tract obstructions. Urethral, prostatic, bladder and ureteral lesions. Symptoms, diagnosis and management. The common psychoneuroses in adults and children. The evaluation of history and signs. The manifestations in the organs. Treatment. Advances in endocrinology as applied to gynecology.

HERMAN KIEFER HOSPITAL

Afternoon. Ward walks and clinics in the common contagious diseases. Evaluation of methods of immunization in measles, scarlet fever, and diphtheria.

Registration is limited. No fee.

Further information about the above courses will be furnished upon request. Director, Department of Postgraduate Medicine, University of Michigan, Ann Arbor, Michigan.

DEPARTMENT OF SOCIETY ACTIVITY

L. FERNALD FOSTER, M.D., Secretary

Council Chairman's

- - - Communication

POST-PAYMENT PLAN

"A STITCH in time saves nine" still holds good when applied to the future of medicine.

At a recent meeting with the Parent-Teacher Association we discussed the benefits of the post-payment plan and the evils of some county health units, whereby the people were taking advantage of the county fee bill to the loss of the family doctor.

One woman spoke of the time a few years ago when her son had mastoiditis and needed an operation and that the doctor refused to operate unless he had all the fee in advance. "We had to go to the county as they allowed us to pay it back in small amounts.

"If you had had your present post-payment plan in effect at that time, it would have helped us and also the doctor," she added.

"*Hold that Patient, Hold that Patient*," figuratively speaking, should be the slogan of all physicians.

In practical practice it means keep your patient medically minded and your side is to see all medical and surgical needs are cared for and that some plan for the economical side is satisfactory. If not your patient will yell: "We want State Medicine."

Have we progressed in the *right* way?

If we had taken care of our poor as we did in the past and not accepted Social Security fees we would have retained our standing with the public.

As we have now digressed, our post-payment plan is the best substitute.

See that you explain this plan to your patients.

P. R. URMSTON, M.D.
Chairman of the Council

ANNUAL CONFERENCE OF COUNTY SECRETARIES

THE Annual Secretaries' Conference for 1937 was held at the Olds Hotel, Lansing, Sunday, February 7, beginning at 11:00 A.M. This annual meeting, which is designed to inspire and instruct the county secretaries, was particularly successful this year. Of the fifty-four County Society secretaries, forty were present. Eight of the absentees were from the Upper Peninsula and the traveling distance and time element involved accounted for their absence. In addition to the forty secretaries there were over sixty others attending the Conference. This group was made up of state officers, councilors, state committee chairmen, presidents and other key men of the component county units. Among the invited guests were Dr. W. F. Northrup, president of the Michigan State Dental Society; Miss Olive Sewell, R.N. secretary of the Michigan State Nurses Association; Mrs. A. V. Wenger, president of the Woman's Auxiliary of the Michigan State Medical Society; and Dr. W. W. Bauer, director of the Council on Health and Public Instruction of the American Medical Association, Chicago. The following program was carried out on schedule:

1. Call to order by Chairman L. Fernald Foster, M.D.
2. Introduction of President Henry E. Perry, M.D., Newberry, Michigan.
President-elect Henry Cook, M.D., Flint, Michigan.
Council Chairman P. R. Urmston, M.D., Bay City, Mich.
3. "Scientific Aspects of Medical Practice Today." Grover C. Penberthy, M.D., Past President, M.S.M.S.
4. "What the 1937 Legislature Holds for the Private Practitioner of Medicine." Henry E. Perry, M.D., Newberry, President, M.S.M.S.
5. "Some Phases of Public Relations." W. W. Bauer, M.D., Chicago, Director of the Bureau of Health and Public Instruction, A.M.A.
6. "Leadership by the Physician and by his County Medical Society." Wm. J. Burns, LLB. Executive Sec'ty. M.S.M.S.
7. Dinner, Main Dining Room, Olds Hotel, 12:15 P.M.
8. Round-table discussions by Committee Chairmen of the M.S.M.S.
9. Adjournment at 4 P.M.

Past President Penberthy of the Michigan State Medical Society gave a very scholarly talk on the historical development of modern scientific medicine. This all important phase of organized medicine was emphasized and impressed upon those present.

President Perry of the State Society presented to the gathering the present status of legislative activity in Michigan as it affected the medical profession. The County Secretaries as key men in their societies were impressed with their responsibility of making and stimulating legislator contacts at home.

Executive Secretary Burns further elaborated upon the various impending legislative bills. He detailed particularly the suggested Occupational Disease Bill and that of Group Hospitalization, also analyzed the various implications of the Social Security Act.

Dr. W. W. Bauer, Chicago, director of the Council of Health and Public Instruction of the American Medical Association, presented his carefully prepared paper on "Some Phases of Public Relations." His presentation was highly inspirational to the group and suggested many practical means of medical publicity for organized medicine. The paper was particularly inspiring to the County Secretaries since it emanated from the parent organization, the American Medical Association.

Following the dinner at 2:00 P. M. a discussion hour was held at which various committee chairmen and others presented condensed accounts of their various activities and projects. The following took part in the program.

1. Dr. L. G. Christian, Chairman of the Legislative Committee, discussed medical legislation in the present Michigan Legislature.
2. Mrs. A. V. Wenger, president of the Woman's Auxiliary, Michigan State Medical Society, made a plea for more auxiliaries and discussed their advantages.
3. Dr. Florence Ames, chairman of the Woman's Auxiliary Committee, added her commendation of the Auxiliaries and urged consideration of such bodies in more of the County Societies.
4. Dr. Alexander M. Campbell, chairman of the Maternal Health Committee, elaborated upon the obstetrical survey being conducted in Michigan and outlined its purposes.
5. Dr. Ralph H. Pino, chairman of the Committee on Economics, gave a clear, concise account of the medical phases of relief and welfare bills.
6. Dr. Loren W. Schaffer, chairman of the Syphilis Control Committee, presented the "Michigan Plan" of syphilis control and an-

nounced its approval by Dr. Slemons, State Commissioner of Health.

7. Dr. L. O. Geib, chairman of the Preventive Medicine Committee, stressed the physician-patient relationship in all preventive work and made a plea for greater participation in this work by the private physician in his practice.
8. Dr. Clare Gates, Field Secretary of the Joint Committee on Health Education, urged co-operation and leadership on the part of county medical societies in all matters of health education.

Before concluding the Conference the Nominating Committee, appointed early in the day and composed of Dr. P. R. Urnston, chairman of the Council, Councilor F. T. Andrews and Secretaries Dr. John McCann, Ionia, Dr. C. E. Umphrey, Detroit and Dr. A. T. Rehn, Newberry, presented the names of Dr. L. E. Holly, Muskegon, and Dr. H. W. Porter, Jackson, as candidates for chairman of the Conference in 1938. Upon the withdrawal of Dr. Porter as candidate, Dr. Holly was unanimously elected chairman for next year.

If the attention paid to all the speakers and those participating in the discussion was indicative of the interest in the Secretaries' Conference, we are convinced that the session was well worth while and productive of much inspiration which should be reflected in greater activity among the fifty-four component county units.

The Conference adjourned at 4:00 P. M. with the presentation of the following specifications for a "Good County Medical Society Secretary" contributed by Dr. H. W. Porter, secretary of the Jackson County Medical Society.

A good county medical society secretary should:

1. Know every man in the county society by his first name.
2. Be able to take minutes so they can be read years later.
3. File these minutes so they can be found.
4. Answer all correspondence promptly and keep a carbon copy for his own protection and reference later.
5. Know more about what each committee is supposed to do than the committee does and
6. Know if they are doing it, and
7. Find out why they are not doing what they are supposed to do, and
8. Be able to pinch for them if they do not do it, till the president has time to appoint another committee.
9. Realize that the position as secretary is a job which is an admission on the part of those who elected him that he is a "horse for work" and that the honorary job of president is more often a matter of popularity based on years of residence in the community.
10. Be ready with a substitute speaker, of good standing, on five hours' notice.
11. Know how to get the dues in and still make

- the delinquent member proud that he had such a standing that he could be late with the payment.
12. Expect criticism for a bad program even if he had nothing to do with it.
 13. Expect no credit for a good program if he did arrange it.
 14. Pull spare dinners out of a hat for those who never make reservations and make them think that it is an honor to be allowed to serve them when they condescend to grace the meeting with their presence.
 15. Know who had the lantern last, where it is, how to produce it out of the said hat, and how to make it work at the last minute.
 16. Apologize for the wrinkles in the sheet that is used for a screen.
 17. Know at a glance who the stranger at the meeting is before he gets kicked out, and why he is there.
 18. Be a mind reader and know who is sick, of what, where and why.
 19. Be able to kid the kidders and take kidding gracefully.
 20. Know all state officers by face and name, including the offices they hold and their preference for Scotch and soda, beer, or Bourbon and water.
 21. Keep his own office in running order and his patients satisfied that the last meeting he attended was an important consultation at a high fee.
 22. Never get sick or sick of the job.
 23. Never be late or absent.
 24. Know who the workers are in the society so the President can appoint them to committees and juggle them around each year so they are always busy and still think that the job is a new one that only they can handle properly.
 25. Never mention any of the above items to anyone.

The following is the attendance roll of the Secretaries' Conference:

Secretaries of County Societies—Allegan: Dr. M. B. Beckett; Allegan; Barry: Dr. G. F. Fisher, Hastings; Bay: Dr. A. L. Ziliak, Bay City; Branch: Dr. F. S. Leeder, Coldwater; Calhoun: Dr. Wilfrid Haughey, Battle Creek; Cass: Dr. K. C. Pierce, Dowagiac; Chippewa-Mackinac: Dr. G. A. Conrad, Sault Ste. Marie; Clinton: Dr. T. Y. Ho, St. Johns; Eaton: Dr. T. Wilensky, Eaton Rapids; Genesee: Dr. C. L. Colwell, Flint; Grand Traverse-Leelanau-Benzie: Dr. E. F. Sladek, Traverse City; Gratiot: Dr. R. L. Waggoner, St. Louis; Hillsdale: Dr. E. G. McGavran, Hillsdale; Huron-Sanilac: Dr. E. W. Blanchard, Decker; Ingham: Dr. R. J. Himmelberger, Lansing; Ionia-Montcalm: Dr. J. J. McCann, Ionia; Jackson: Dr. H. W. Porter, Jackson; Kalamazoo: Dr. L. W. Gerstner, Kalamazoo; Kent: Dr. J. M. Whalen, Grand Rapids; Lapeer: Dr. Clarke Dorland, Lapeer; Lenawee: Dr. Esli T. Morden, Adrian; Livingston: Dr. D. C. Stephens, Howell; Luce: Dr. A. T. Rehn, Newberry; Macomb: Dr. R. F. Salot, Mt. Clemens; Manistee: Dr. C. L. Grant, Manistee; Monroe: Dr. Florence Ames, Monroe; Muskegon: Dr. L. E. Holly, Muskegon; Newago: Dr. W. H. Barnum, Fremont; No. Michigan: Dr. Gilbert Saltonstall, Charlevoix; O.M.C.O.R.O.: Dr. C. G. Clippert, Grayling; Oakland: Dr. O. O. Beck, Birmingham; Ottawa: Dr. K. N. Wells, Spring Lake; St. Clair: Dr. G. M. Kesl, Port Huron; St. Joseph: Dr. J. W. Rice, Colon; Saginaw: Dr. H. C. Wallace, Saginaw; Shiawassee: Dr. R. J. Brown, Owosso; Tuscola: Dr. B. H. Starmann, Cass City; Washtenaw: Dr. L. J. Johnson, Ann Arbor; Wayne: Dr. C. E. Umphrey, Detroit, and Executive Secretary James A. Bechtel, Detroit; Wexford: Dr. Benton Holm, Cadillac.

Presidents of County Societies—Barry: Dr. H. S. Wedel, Freeport; Genesee: Dr. A. Thompson, Flint; Grand Traverse-Lencenau-Benzie: Dr. Dwight Goodrich, Traverse City; Gratiot-Isabella-Clare: Dr. Kenneth P. Wolfe, Breckenridge; Lapeer: Dr. H. M. Best, Lapeer; Lenawee: Dr. A. W. Chase, Adrian; Livingston: Dr. H. L. Sigler, Howell; Macomb: Dr. J. N. Scher, Mt. Clemens; Saginaw: Dr. L. C. Harvie, Saginaw; St. Clair: Dr. H. O. Brush, Port Huron; Washtenaw: Dr. R. M. Nesbit, Ann Arbor; Wayne: Dr. T. K. Gruber, Eloise; Wexford: Dr. Gregory Moore, Cadillac.

Councilors of M.S.M.S.—Dr. J. E. McIntyre, Lansing; Dr. F. T. Andrews, Kalamazoo; Dr. I. W. Greene, Owosso; Dr. T. F. Heavenrich, Pt. Huron; Dr. W. E. Barstow, St. Louis; Dr. P. R. Urmon, Bay City; Dr. H. H. Cummings, Ann Arbor; Dr. A. S. Brunk, Detroit.

State Society Officers—Dr. Henry E. Perry, Newberry, President; Dr. Henry Cook, Flint, President-Elect; Dr. L. Fernald Foster, Bay City, Secretary; Dr. James H. Dempster, Detroit, Editor; Dr. F. E. Reeder, Flint, Speaker; Dr. G. C. Penberthy, Detroit, Past President; Wm. J. Burns, Lansing, Executive Secretary; Dr. W. W. Bauer, Director, Bureau of Health and Public Instruction, A.M.A., Chicago.

Other Guests—Drs. L. G. Christian, Lansing; L. O. Geib, Detroit; A. M. Campbell, Grand Rapids; R. H. Pino, Detroit; L. W. Shaffer, Detroit; F. B. Miner, Flint; A. G. Sheets, Eaton Rapids, Wm. S. Reveno, Detroit; A. V. Wenger, Grand Rapids; R. C. Perkins, Bay City; W. H. Haughey, Battle Creek; H. A. Miller, Lansing; R. L. Finch, Lansing; E. I. Carr, Lansing; D. M. Snell, Lansing; D. A. Cameron, Brighton; E. W. Caster, Mt. Clemens; George Waters, Pt. Huron; W. E. Ward, Owosso; J. S. DeTar, Milan; W. F. Northrup, Detroit, President of Michigan State Dental Society; Miss Olive Sewell, Lansing, Secretary of Michigan State Nurses' Association; Mrs. A. V. Wenger, Grand Rapids, President of Woman's Auxiliary, M.S.M.S.; Clare Gates, Ph.D., Ann Arbor; Mr. Harry R. Lipson, Detroit, Assistant Secretary, Wayne County Medical Society.

IMPORTANT ACTIVITIES OF MSMS AND ITS COUNTY SOCIETIES

I. Legislation:

1. Basic Science Bill, Brochure, "Michigan Needs a Basic Science Law."
2. Occupational Disease Bill.
3. Workmen's Compensation Law.
4. Welfare and Relief—with ten proposed bills including the afflicted and crippled child.
5. Social Security—including maternal and child welfare and syphilis control.
6. Group Hospitalization.
7. Cult Proposals.

II. Economics:

1. The State Society's five points for the Welfare Commission's bill.
2. Post-payment plans for the borderline group.
3. Socialized Medicine; Brochure, "Who Wants Socialized or State Medicine?"

III. Medical Speakers before Lay Groups and Organizations: (Coöperation from Joint Committee on Health Education.)

IV. Speakers on Scientific subjects for Programs of County Medical Societies:

Programs available from Committees of the Michigan State Medical Society on

1. Cancer
2. Maternal Health.
3. Mental Hygiene.
4. Syphilis.
5. Tuberculosis
6. Preventive Medicine.
7. Economics.

V. Radio Programs weekly over 18 stations throughout Michigan.

VI. Exhibits at the Annual State Meeting of the Michigan State Medical Society:

1. Scientific.
2. Technical.

VII. The Journal of the Michigan State Medical Society.

1. Scientific articles.
2. Special numbers in May and September, 1937.
3. County Society news, County Society notes, necrologies, etc.
4. Advertising.

- VIII. Michigan State Medical Society Bureau of Information, contacting 425 newspapers in Michigan.
- IX. Medical Supplements in city and county newspapers.
- X. The Filter System.
- XI. County Health Units—educational and administrative.
- XII. Non-practice protection.
- XIII. Ethics Committee of the Michigan State Medical Society.
- XIV. Development of the Woman's Auxiliaries.
- XV. Membership campaigns for eligible non-members.

The above answers in part only the question that is sometimes raised as to "What is the State Society Doing?"

It is the responsibility of every member of the Michigan State Medical Society to acquaint himself with these activities and to assist in making them available whenever needed to his county medical society and local community.

COUNCIL AND COMMITTEE MEETINGS

1. *January 29, 1937*—Preventive Medicine Committee—Jackson—11:00 A.M.
2. *January 29, 1937*—Advisory Committee on Syphilis Control—Jackson—11:00 A.M.
3. *February 5, 1937*—Liaison Committee of Michigan State Medical Society with Dentists, Nurses, and Pharmacists—Pontiac—8:00 P.M.
4. *February 7, 1937*—Public Relations Committee—Olds Hotel, Lansing—4:00 P.M.
5. *February 14, 1937*—Contact Committee with Governmental Agencies—Olds Hotel, Lansing—2:00 P.M.
6. *February 17, 1937*—Maternal Health Committee—University Hospital, Ann Arbor—12:00 noon.
7. *February 18, 1937*—Executive Committee of The Council—Owosso City Club, Owosso—3:00 P.M.
8. *February 18, 1937*—Legislative Committee—Owosso City Club, Owosso—4:30 P.M.
9. *February 19, 1937*—Liaison Committee of Michigan State Medical Society with Dentists, Nurses, and Pharmacists—Hotel Statler, Detroit—6:30 P.M.

The Physician and the Traffic Problem

Lowell S. Selling, Detroit (*Journal A. M. A.*, Jan. 9, 1937), is of the opinion that the chief reason for criticism of the tests proposed in some states and now given to drivers in others, which should be of interest to physicians, is the fact that these tests in themselves do not separate the good from the bad driver. Many of the driving difficulties are due to emotional handicaps or arise from some temporary physical condition that is correctable or that might not occur again in the same individual during the rest of his life. Under these conditions the mere physical

examination, a mere check-up of the eyesight, or a brief psychologic test, such as the Binet or some simpler test, would fail to reveal why the man under consideration had his accident or why he is a chronic law violator. Until physicians themselves give these examinations, compile data and show just where the line must be drawn between adequate and inadequate physical capacities, licensing by means of physical and mental tests will be more or less of a farce. A mere physical handicap is no contraindication to driving, and it requires the decision of an experienced and highly trained individual to make a determination. The features which the physician must consider when mapping out plans for making examinations for driver's license, or examining offenders or persons involved in accidents, from the physical and mental standpoint, are the general physical condition, the eye examination and mental deviations.

Club Dues Versus Medical Society Dues

Ever and anon a complaint is received in regard to medical society membership dues. As a rule the complaining member is a member in name only, he attends his county and state meetings on rare occasions and is possessed of little information as to what is being done in defense of his profession or to prevent outside encroachment on his practice and livelihood. By nonattendance he neglects opportunities to improve his professional ability and standards of practice.

When questioned it is found that the complainant is a member of several clubs and lay social organizations. He pays from \$75 to \$150 for the privilege of playing golf. Dues of \$60 to \$125 are paid for admission to a club where he can pay 85 cents to \$1.25 for his noon lunch, an hour of bridge, billiards or checkers and say "Howdy" to the banker, lawyer or merchant Pooh Bah of his town. He readily remits \$50 to \$100 per year to some luncheon club where he can sing the "old songs," be called Jack, and listen for thirty minutes to some imported speaker describe how a can is made in six operations from one small piece of tin. Then there is the lodge, church, fishing or skeet club, and possibly one or two other lay organizations. All told, his nonmedical organizations tap him for from \$200 to \$400 for yearly dues. His medical society dues average from \$20 to \$50 per year, the average being about \$25 per year.

Criticism is not directed against membership in these organizations, provided income permits. Criticism is directed against such membership when complaint is made, "we are paying too much for what we get." That claim is challenged because facts exist to disprove that statement. The trouble is that this member has never taken the pains to ascertain or acquire the full benefits of membership in his county medical society. He can secure the facts by reading the editorials and Association activities columns in the preceding twelve issues of *California and Western Medicine*.^{*} For value received a physician obtains more from his medical dues than he obtains from his dues paid to non-medical organizations. The value of returns is so great and membership benefits so vital that an eligible physician cannot afford *not* to be a member.—*California and Western Medicine*.

^{*}If the reader is a Michigan M.D. he may substitute JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

MID-WINTER MEETING OF THE COUNCIL

January 20 and 21, 1937

HIGHLIGHTS:

1. Annual Meeting set for Grand Rapids, September 27, 28, 29, 30, 1937.
2. Secretary, Treasurer, Editor, Medico-Legal Committee, Executive Secretary elected.
3. Budget for 1937 approved.
4. Venereal Disease Control Program for Michigan (with preservation of physician-patient relationship) approved.
5. Five points covering medical phases of relief and welfare agreed upon for inclusion in proposed recodification of laws.
6. Preliminary steps to create Health League of Michigan.
7. Committee formed to represent M.S.M.S.-Michigan Hospital Association-Michigan Association of Roentgenologists, in crippled-afflicted child work.
8. Brochure: "Michigan Needs a Basic Science Law" approved for publication.
9. Study made of proposed occupational disease and of group hospitalization bills.
10. Hillsdale County Medical Society transferred to Second Councilor District.

First Session of the Council

1. *Roll Call.*—The meeting of The Council was called to order in the Judge Woodward Room of the Statler Hotel, Detroit, at 2:15 p. m., on January 20, 1937, by Dr. P. R. Urmston, Chairman. Those present were Drs. Urmston, F. E. Reeder, Flint; B. H. Van Leuven, Petoskey; Wilfrid Haughey, Battle Creek; Vernor M. Moore, Grand Rapids; R. H. Holmes, Muskegon; F. T. Andrews, Kalamazoo; W. E. Barstow, St. Louis; I. W. Greene, Owosso; F. C. Bandy, Sault Ste. Marie; W. A. Manthei, Lake Linden; F. A. Baker, Pontiac; H. R. Carstens, Detroit; A. S. Brunk, Detroit; J. Earl McIntyre, Lansing. Also present were Dr. Henry E. Perry, Newberry, President; Dr. Henry Cook, Flint; Dr. James H. Dempster, Detroit; Dr. L. Fernald Foster, Bay City; Dr. A. F. Jennings, Detroit; Dr. H. A. Luce, Detroit; and Executive Secretary Wm. J. Burns. Absent: Drs. T. F. Heavenrich, Port Huron; Harlan MacMullen, Manistee, and H. H. Cummings, Ann Arbor.

2. *Minutes.*—The minutes of the last meeting of The Council, and the minutes of the meetings of the Executive Committee of The Council were approved on motion of Dr. Holmes, seconded by several and carried unanimously.

3. *Editor's Annual Report.*—The Chair called upon Dr. J. H. Dempster for his annual report, which was read:

THE EDITOR'S ANNUAL REPORT—1936

The volume of THE JOURNAL of 1936, namely, the thirty-fifth, is slightly larger than its predecessor; it consists of 836 pages of reading matter exclusive of advertising, as compared with 812 pages of reading matter of volume thirty-four of the preceding year. The typographical appearance of THE JOURNAL is generally admitted to be as fine a specimen of craftsmanship of printing as a reader might wish. The printing of the minutes of the council and executive committee of the council, as well as the minutes of important standing committees, gives every member of the Michigan State Medical Society an opportunity to check up on the stewardship and industry of the elected representatives of the Society. It forms a liaison, not only between members of the Society and the Council and committees, but among the members, nearly four thousand in number, themselves. It is more necessary than ever that every member be thor-

oughly informed regarding the conditions affecting medical practice.

Papers read at the annual meeting of the Society in September form a nucleus for the ensuing year's contents of THE JOURNAL. However, as in other years, there has been no attempt to confine the contents of THE JOURNAL to the papers read before the various sections at the annual meeting. Many excellent papers have been presented before the constituent county societies of the state. The writing of carefully prepared papers on medical and surgical subjects should be encouraged. The original paper, so-called, serves not only as a review of the accomplishments in the special subject, but as a record of any new knowledge.

THE JOURNAL during the year has contained a number of special features of interest to the profession, notably the medico-legal department for which the editor here thanks the legal staff under the auspices of the medico-legal committee. During the first half of the year, considerable space was accorded the state Women's Auxiliary. It is of advantage to the Auxiliary and to THE JOURNAL that such relations should continue. THE JOURNAL wields the same influence in the way of integrating the various county branches of the State Auxiliary as it has in the promotion of unity among the constituent county medical societies of the state.

THE JOURNAL is the mouthpiece of organized medicine in the state. Realizing this, in the discussion of various phases of social and economic medicine, particularly, I have welcomed the opportunity of discussing such subjects with members of the publicity committee. My relations with the publications committee and the secretary and executive secretary as well as the council have been most cordial.

All of which is respectfully submitted,

J. H. DEMPSTER, M.D.

The report was referred to the Publications Committee.

4. *Reports of The Councilors.*—The Chair called upon each Councilor for the report on the condition of the profession in his district. The following councilors reported: Drs. Holmes, Manthei, Bandy, Van Leuven, Haughey, Brunk, Moore, Andrews, Barstow, Baker, Greene and Dr. Urmston. These reports, together with recommendations offered during the discussion of the several reports, were referred to the county societies' committee.

5. *Secretary's Annual Report.*—The annual report of the Secretary was presented by Dr. L. Fernald Foster:

SECRETARY'S ANNUAL REPORT—1936

I herewith submit the Secretary's report for 1936. While having assumed the duties of this office for but two and one-half months of the year just ended, the knowledge of the Society's activities gained through the chairmanship of the Public Relations Committee, has enabled me without too much difficulty to report on the year's work carried on so ably by my predecessor, Dr. C. T. Ekelund, and Executive Secretary Wm. J. Burns.

The year 1936 was productive of more constructive activity than has characterized probably any year in the Society's history. This activity was brought about by changes in our social order which have required that many new problems had to be faced and solved—problems requiring the thought and action of the best minds in the profession.

Membership

The total membership for 1936 was 3,725 with dues of \$36,590.00 accruing to the Society. There were 141 unpaid dues for the year. The number of unpaid dues in 1935 was 138. The membership tabulation for the years 1935 and 1936 showing net gains and losses, unpaid dues and deaths is as follows:

MEMBERSHIP RECORD

County	1935	1936	Loss	Gain	Unpaid	Deaths
Allegan	18					
(Transferred from Kalamazoo, 14; from Ottawa, 4)						
Alpena-Alcona-Presque Isle	15	13	2	..	..	1
Barry	17	15	2	..	1	..
Bay-Arenac-Iosco						
Gladwin	65	69	..	4	..	1
Berrien	55	51	4	..	6	..
Branch	17	22	..	5	3	..
Calhoun	110	118	..	8	..	1
Cass	11	12	..	1	1	..
Chippewa-Mackinac	17	20	..	3	..	..
Clinton	13	11	2	..	1	..
Delta	22	18	4	..	1	..
Dickinson-Iron	19	21	..	2	1	..
Eaton	25	27	..	2	..	..
Genesee	155	153	2	..	9	3
Gogebic	25	27	..	2	..	..
Grand Traverse-Leelanau-Benzie						
Benzie	27	31	..	4	..	1
Gratiot-Isabella-Clare ..	32	33	..	1	1	2
Hillsdale	26	27	..	1	..	..
Houghton-Baraga						
Keweenaw	35	34	1	..	1	..
Huron-Sanilac	29	25	4	..	4	..
Ingham	124	128	..	4	..	1
Ionia-Montcalm	35	33	2	..	3	..
Jackson	82	86	..	4	1	..
Kalamazoo-Van Buren ..	131	134	..	3	1	1
Kent	216	220	..	4	10	1
Lapeer	14	13	1	..	1	..
Lenawee	35	41	..	6	..	1
Livingston	16	17	..	1	..	..
Luce	9	12	..	3	..	..
Macomb	37	34	3	..	..	..
Manistee	15	14	1	..	..	1
Marquette-Alger	33	35	..	2	..	2
Mason	9	7	2	..	3	..
Mecosta-Osceola	18	19	..	1	..	1
Menominee	10	12	..	2	..	..
Midland	11	12	..	1	..	..
Monroe	34	36	..	2	2	..
Muskegon	69	70	..	1	..	1
Newaygo	12	10	2	..	..	..
No. Michigan:						
Antrim, Charlevoix, Emmet, Cheboygan ...	31	28	3	..	..	..
Oakland	101	114	..	13	2	..
Oceana	11	10	1	..	..	..
O. M. C. O. R. O.:						
Otsego, Montmorency, Crawford, Oscoda, Roscommon, Ogemaw ..	13	13	..	..	..	..
Ontonagon	5	5	..	..	..	..
Ottawa	35	37	..	2	..	..
Saginaw	91	90	1	..	2	..
Schoolcraft	5	6	..	1	..	..
Shiawassee	29	29	..	..	..	..
St. Clair	40	42	..	2	..	..
St. Joseph	15	12	3	..	1	..
Tuscola	30	31	..	1	..	1

Washtenaw	152	159	..	7	5	3
Wayne	1449	1471	..	22	80	12
Wexford:						
Kalkaska, Missaukee ..	18	18	..	..	3	..
	3650	3725	40	115	141	35
		3650		40		
Gain for 1936.....		75		75		

With nearly 5,500 physicians in the state an active membership drive is being planned to increase the number of members in the State Society. This drive must be executed by the local county societies and its individual members.

Deaths During 1936

During 1936 we regretfully record the deaths of the following members:

Alpena County—*Dr. Duncan A. Cameron, Alpena.
Barry County—Dr. Donald McGee, Delton.
Bay County—Dr. F. S. Baird, Bay City.
Berrien County—Dr. Burton D. Giddings, Niles.
Branch County—Dr. W. W. Williams, Coldwater.
Calhoun County—Dr. Edwin M. Chauncey, Albion.
Delta County—Dr. J. O. Groos, Escanaba.
Genesee County—Dr. Jefferson Gould, Fenton; Dr. H. D. Knapp, Flint; Dr. C. F. Moll, Flint; Dr. E. Rumer, Flint.
Gratiot-Isabella-Clare Counties—Dr. Wm. G. Young, Shepherd; Dr. Lois W. Torres, Mt. Pleasant.
Grand Traverse-Leelanau-Benzie Counties—Dr. Alfred C. Wilhelm, Traverse City.
Hillsdale County—Dr. S. B. Frankhauser, Hillsdale.
Huron-Sanilac County—Dr. Dugald D. Munro, Kinde.
Ingham County—Dr. George F. Bauch, Lansing.
Jackson County—*Dr. F. W. Rogers, Jackson.
Kalamazoo-Van Buren Counties—Dr. C. A. Bartholomew, Martin; Dr. John D. Stewart, Hartford; Dr. Herbert J. Wing, Hartford.
Kent County—Dr. Glenn A. Easton and Dr. Alden H. Williams, Grand Rapids.
Livingston County—Dr. J. E. Cunningham, Fowlerville.
Lenawee County—Dr. Chas. A. Blair, Morenci; Dr. J. W. Nixon, Holloway.
Manistee County—Dr. Lewis S. Ramsdell, Manistee.
Marquette-Alger Counties—*Dr. Frederick M. Harkin and Dr. Wm. B. Lunn, Marquette; Dr. Theodore W. Scholtes, Munising.
Mecosta County—Dr. Omar J. East, Reed City.
Monroe County—Dr. H. E. Kelly, Ida; Dr. Hal M. Parker, Monroe.
Muskegon County—Dr. F. W. Garber, Sr., Muskegon.
Newaygo County—Dr. S. J. Richardson, White Cloud.
Oakland County—Dr. Peter Stewart, Royal Oak.
Saginaw County—Dr. Elmore E. Curtis, Dr. N. J. Pike, Dr. S. A. Sumby and Dr. Roy S. Watson, Saginaw.
St. Joseph County—Dr. Fred W. Robinson, Sturgis.
Shiawassee County—Dr. Herbert E. Bailey, Corunna.
Tuscola County—Dr. James MacKenzie, Reese.
Washtenaw County—Dr. A. M. Barrett, Dr. B. H. Honeywell, Dr. Ira D. Loree and Dr. Louis Rominger, Ann Arbor; Dr. Henry W. Schmidt, Chelsea.
Wayne County—Dr. James H. Bogan, Dr. James E. Clark, Dr. Chas. G. Jennings, Dr. Homer L. Kedney, Dr. Walter E. King, Dr. Murdoch M. Kerr, Dr. E. P. Mills, Dr. Thomas F. Mullen, Dr. Earl A. Peterman, Dr. J. W. Powell, Dr. Wm. H. Rieman, Dr. Tobias Sigel, and Dr. F. E. Zumstein, Detroit; Dr. John H. Kimble, Plymouth; Dr. Frederick P. Sprague, Wyandotte; Dr. R. J. Tyrna, Belleville; Dr. W. E. Woodbury, New York City.
Wexford County—*Dr. John K. Doudna, New York City; Dr. B. W. Babcock, Fife Lake.

Financial Status

The fiscal year closed on December 26, 1936, and the statement of our certified public accountants, Ernst & Ernst (published in THE JOURNAL, February, 1937, pages 113, 114, 115, 116), depicts the financial status of the Society as of that date. Several points of interest are disclosed by this report, which deserve especial attention:

1. The auditors find justifiable an increase in the net worth of the Society of \$4,171.81 which is

*Honorary member.

largely accounted for by an increase in the quoted market value of the invested funds.

2. **THE JOURNAL:** Advertising sales in 1936 increased \$1,997.24 over 1935 (which in turn had been \$1,014.31 greater than 1934). The increase during the past year was due in a great measure to concerted efforts which were made to secure more advertising. Based upon the customary allocation of \$1.50 from each member's dues, **THE JOURNAL** showed a profit in 1936 of \$1,250.97 as against \$1,112.37 in 1935. The cost of printing **THE JOURNAL** in 1936 was \$9,593.73 as against \$8,525.79 in 1935.

3. The Medico-Legal Defense Fund disbursements in 1936 exceeded receipts in the amount of \$1,047.90. During the year only fifty cents of each member's annual dues were credited to this fund. During 1935, \$1.50 of each member's annual dues was credited. However, a reduction of \$1,619.50 in the reserve to reduce securities of this fund to quoted market values resulted in a net increase of \$571.60 in the Reserve for Medico-Legal Defense Fund. The total accumulated Reserve for Medico-Legal Defense is \$15,984.84.

The year ended in the black in spite of the increased activity of the officers and committees of the State Society.

Committee Reorganization

The mounting costs of administration would indicate that a consolidation of committees be considered, in order to decrease costs.

Encouragement should be had, however, for the mounting costs of Committee activities. The tremendous amount of work done by the many committees of the Michigan State Medical Society is indicative of much individual interest in the problems of organized medicine. Will a curtailment of such committee costs be a deterrent to the interest and zeal of a large number of committeemen—a condition for which we have striven for some time?

The 1936 Annual Meeting

The 1936 Annual Meeting held in Detroit was a banner meeting. Over 1,700 persons attended this meeting which provided one of the finest scientific programs ever presented by the State Society, and a most satisfactory technical exhibit. The resources of the session provided for its total expense and a substantial cash balance. Too much credit for the success of this meeting cannot be given former Secretary Ekelund and Executive Secretary Burns. This session was productive of many ideas and experiences that will enhance success of future Annual Meetings.

The County Secretaries' Conference

The second County Secretaries' conference of 1936 was held in conjunction with the Annual Meeting in Detroit. Sixty-five physicians attended the conference whose program provided eight short, inspiring addresses. The interchange of ideas at the conference and contacts of the County Secretaries with the State Society's officers provides the greatest inspiration for the development of more active component units.

The 1937 Conference will be held in Lansing, Sunday, February 7. A subsequent report will detail this program.

Committees

Neither time nor space permits your Secretary to detail the activities of the committees of the Michigan State Medical Society. Not one committee has been unmindful of its obligations. Never before has there been involved so many constructive

programs, never before have so many vital problems been studied and solved with more sound judgment. While our organization has more committees than most similar organizations, still each committee seems to find itself faced with many important duties to discharge. We are establishing leadership in every field of organized medical endeavor.

The establishment this year of a Standing Ethics Committee should do much to solve an occasional disturbing problem of particularly the small county societies. It is hoped that this committee may not frequently be called upon.

Reference should be made to the Special Committee on Study of Fee Schedules A, B, C, D. The Committee, holding over from last year, has recently joined with the Michigan Hospital Association and the Michigan Association of Roentgenologists to attempt to solve the problems of fees and rates for medical and hospital service to State patients, which holds a mutual interest to these groups.

Brochure on Socialization of Medicine

The enthusiasm with which this brochure received national recognition is worthy of note. The publication required two printings in as many months. It has been reprinted in toto by various journals and publications. Its excerpts have been widely quoted. To date over 9,500 copies have been distributed.

The Development of "State Society Nights"

During the past year various county societies have held meetings at which the state officers, councilors and committeemen have appeared in the interest of organized medicine and the Michigan State Medical Society. This was a development of the recommendation to the House of Delegates that more contact be made with the county societies by the State officers. These meetings have served to keep the individual physician better informed on activities and policies of the State Society. They have been most productive of interest and have been a big factor in keeping alive active societies and in arousing the less active components.

The Journal

A more active attempt to increase **THE JOURNAL** advertising with a view to making the publication more self-sustaining has been begun. This objective should be reached with the coöperation of the county societies and their individual members.

Recommendations:

Your secretary concludes his report with the following recommendations, that:

1. A concerted membership drive be instituted in every county society in the state during the month of February, 1937.
2. **THE JOURNAL** advertising be increased to make that publication self-sustaining. This can be accomplished through the active assistance of the membership in contacting prospective advertisers.
3. The study of Councilor districts and county society jurisdictions be made.
4. Consideration be given to a new plan of committee organization. But that care be taken that no jeopardy may be had to the growing enthusiasms and interest of the many committeemen now actively engaged in the work of the Michigan State Medical Society.
5. The "missionary" work being done by the institution of "State Society Nights" and the visiting of county societies by the Secretaries and Councilors be continued and expanded.

6. Greater publicity be given activities of the Michigan State Medical Society and the County Societies through the Press and personal appearances of physicians before lay groups.

Your secretary wishes to express to the Council his sincere appreciation of its coöperation and encouragement during the few months of his service. He desires to commend the splendid spirit of interest which every committee has manifested. To Mr. Burns, executive secretary, and his office force, too much appreciation cannot be expressed. The untiring enthusiasm, the constructive suggestions and the forceful execution by Mr. Burns have been a decided inspiration in the work of the secretary.

Respectfully submitted,

L. FERNALD FOSTER, M.D.

January 20, 1937.

Secretary.

The report was referred to the County Societies' Committee.

6. *Treasurer's Annual Report.*—The annual report of Treasurer Wm. A. Hyland was read:

TREASURER'S ANNUAL REPORT—1936

As Treasurer of the Michigan State Medical Society, I wish to submit the following report for the year 1936:

As required by the by-laws of the Society, the usual indemnity bond was filed with the State Secretary.

At a meeting of the Council, held on January 15, 1936, I was authorized to change the bonds of the Herald Square Realty Corporation (6 per cent), pursuant to the Plan of Reorganization, to new bonds at 3 per cent.

The Executive Committee also authorized me to execute for the Michigan State Medical Society the "Acceptance of the Amended Plan of Reorganization" of the Public Gas and Coke Co. as recommended.

On May 1, 1936, the \$3,000 Pennsylvania Railroad Company 40-year 5 per cent Secured Bonds, due November 1, 1964, were called for payment. In this connection, the Executive Committee of the Council at its meeting held on February 26, 1936, approved my recommendation and authorized me to make collection on these bonds. At the same meeting, my recommendation that the \$4,000 Certificate of Deposit on deposit in the Lansing National Bank which fell due on January 27, 1936, be reinvested, together with the money collected from the Pennsylvania Railroad Company bonds, in more securities for income purposes, with not more than \$2,000 invested in any one issue, was approved by the Council, placing \$5,000 worth of these bonds in the Medico-Legal Defense Fund, to equalize the bookkeeping account. As a result, the following purchases were made:

General Fund:

\$2,000 Central Illinois Public Service Co.

Medico-Legal Defense Fund:

\$2,000 Canadian Pacific Railway Co.

\$2,000 Southern Pacific Co.

\$1,000 Dominion of Canada (Government of)

At a meeting of the Executive Committee held on April 22, 1936, the Council instructed that the bond of the Treasurer be increased from \$25,000 to \$35,000. This has been executed.

The \$2,000 American Telephone and Telegraph Company bonds, 5s, due 1960, were called for payment on January 1, 1937, and as per authority set forth at the meeting of the Executive Committee on November 11, 1936, I obtained \$2,000 American Telephone and Telegraph Company 3¼ per cent bonds, due December 1, 1966, and now hold Temporary Debentures without coupons, exchangeable

for a like principal amount of engraved debentures when ready for delivery. The \$2,000 American Telephone and Telegraph Company bonds called for payment on February 1, 1937, are to be reinvested at that time.

The following securities are now in my holding:

General Fund—Bonds:

American Telephone and Telegraph Co.....	3¼%	\$2,000
Associated Gas and Electric Corp.....	4%	2,000
Central Illinois Public Service Co.....	4½%	2,000
Community Power and Light Co.....	5%	2,000
G. R. Affiliated Corp.....	5%	6,000
Herald Square Bldg. Co., income.....		2,000
Lower Broadway Properties, Inc.....	6%	2,000
National Electric Power Co.....	5%	5,000
New England Gas and Electric Co.....	5%	1,000
Peoples Light and Power Corp.....	5½%	1,000
United Light and Power Co.....	5½%	2,000
American Telephone and Telegraph Co.....	5%	2,000
Canadian Pacific Railways.....	4%	2,000
Government of Dominion of Canada.....	2½%	1,000
G. R. Affiliated Corp.....	5%	1,000
International Telephone and Telegraph Co..	5%	2,000
New England Gas and Electric Co.....	5%	1,000
New York Central Railroad Co.....	4%	2,000
Peoples Light and Power Corp.....	5½%	1,000
Public Gas and Coke Co. (Receipt for bonds)	5%	3,000
Southern Pacific Co.....	4½%	2,000

Stocks:

National Gas and Electric Corp.—Common		960
96 shares		

The worth of our securities at cost.....\$45,253.75

They shrunk at the height of the depression to a total worth of..... 18,310.00
(Estimation of Dec. 23, 1933)

At present, under date of Jan. 10, 1937, the worth through appreciation has increased to a total of..... 34,193.00
(Almost doubling in slightly over three years)

Our approximate Market Value on January 10, 1936

Our approximate Market Value on January 10, 1937

Showing an appreciation in the past year of

There has been calling and refunding of certain bonds, also some reinvestments, as before mentioned. There is a possibility of one or two issues being refunded in the future.

After careful analysis and considerable advice from well-informed circles, I feel that for the present we should not disturb any of the issues in our possession. However, when the time occurs for any change, I shall keep the Executive Committee informed as also the Finance Committee and carry on the same principle we have employed during the past.

At this time I wish to voice the appreciation we owe to the original purchasers of our securities and also to inform you that I have endeavored to carry out the same financial plans that they had in mind, and have constantly made every effort to carry on their judgment.

I wish to thank very much the Executive Committee of the Council for its coöperation and endorsement of my suggestions and am very enthusiastic regarding the further-up-trend of our holdings.

Again, I thank you.

Respectfully submitted,

WILLIAM A. HYLAND, M.D.

Treasurer.

The report was referred to the Finance Committee.

7. *Annual Report of the Publications Committee.*—This report was presented by Dr. A. S. Brunk, Chairman:

REPORT OF PUBLICATIONS COMMITTEE—1936

It is again my pleasure in behalf of the Publications Committee of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY, to make the chairman's annual report.

The size of THE JOURNAL has increased during 1936 as compared with the volume of 1935. There were 836 pages of reading matter or sixty-nine and two-thirds pages per issue. The editorial policy of THE JOURNAL has been well maintained, and we believe it reflects very creditably the opinions of the profession as a whole, on the various subjects handled editorially. There has been nothing published that would compromise any position the House of Delegates or the Council or the Executive Committee have taken, or may take, on any of the medical, social, or economic problems which have engaged the attention of the Society. The excellence of the quality of the contributed papers has been fully maintained and THE JOURNAL has received its share of abstracts in *The Journal of the American Medical Association*.

THE JOURNAL, as is well known, is maintained by the sum of one dollar and a half which has been appropriated from the annual dues of each member, together with the revenue derived from the advertising pages. THE JOURNAL is owned by the entire membership of the Michigan State Medical Society. This is mentioned to impress upon the Society the necessity of patronizing advertisers whose products are selected on the basis of their quality, and the willingness of the advertiser to conform with the ethical standards of the profession. It would be possible to increase the amount of advertising very materially by relaxing the censorship on the quality of advertisements. This, however, your management will not sanction. Your committee feels that THE JOURNAL should reflect the high ideals of the profession in every way.

In addition to the contributed papers and editorials, the section on county activities continues with very complete reports of transactions of all meetings of the year. The report of the annual meeting of the House of Delegates has been presented verbatim and completely indexed for convenient reference. The February number of THE JOURNAL each year contains a financial statement as well as a complete report of the annual meeting of the Council. Due prominence has been given to the reports of the county correspondents and an endeavor has been made to have a general news section that will include as many items as possible of general interest to the entire profession of the state.

Your committee earnestly urges upon the members a thorough perusal of each number of THE JOURNAL as it appears. An endeavor has been made to include every item of interest of a medical nature, whether it be a contribution in the way of an original paper or a news item of general interest.

All of which is respectfully submitted,

J. E. MCINTYRE, M.D.
HOWARD H. CUMMINGS, M.D.
VERNON MOORE, M.D.
A. S. BRUNK, M.D.

The report was referred to the Publications Committee.

8. *Postgraduate Education*.—The Executive Secretary reported that Dr. H. H. Cummings had telephoned him relative to the work of the Advisory Committee on Postgraduate Education in that the registration had increased in 1936, that costs

had mounted, and the Advisory Committee may ask the Budget Committee for an appropriation of \$1,500 for 1937. The whole matter of the work of the Advisory Committee on Postgraduate Education was discussed by The Council, which laid the subject on the table until Dr. J. M. Robb could give more information on same.

9. *Plans for 1937 Annual Meeting*.—Secretary Foster reported on the progress of the Committee on Scientific Work relative to the program and also the scientific and technical exhibits. The labyrinth idea for the exhibit was discussed and adopted by The Council on motion of Drs. Bandy-McIntyre. Carried unanimously. The Council formally resolved to hold the 1937 meeting in the Civic Auditorium, Grand Rapids, on September 27, 28, 29, 30, 1937, on motion of Drs. Andrews-Haughey and carried unanimously. Dr. Reeder, Speaker of the House of Delegates, suggested that the First Session of the House of Delegates should be held on Monday at 9:00 a. m.; the Second Session of the House, Monday afternoon at 3:00 p. m.; the Third Session of the House, Monday night at 8:00 p. m. The Secretaries were instructed to appoint any local committees necessary to take care of local arrangements.

Dr. Urmston suggested that the annual report of The Council be developed in advance of the Annual Meeting, insofar as possible, and published with all other reports in the Delegates' Handbook. This was approved by The Council on motion of Drs. Baker-McIntyre, and carried unanimously.

10. *The Council recessed* at 5:40 p. m. for dinner.

Second Session of The Council

11. *Roll Call*.—The Second Session of The Council was called to order by Chairman Urmston on January 20 at 8:00 p. m. All who were present at the First Session were also present at the Second Session. Also present were: Drs. R. H. Pino, E. R. Witwer, F. B. Burke, L. O. Geib, Don M. Morrill, L. W. Shaffer, Wm. J. Stapleton, Jr., and T. K. Gruber.

12. *Minutes* of the First Session of the Mid-winter Meeting of The Council were read and approved.

13. *Annual Report of Medico-Legal Committee*.—Dr. Wm. J. Stapleton, Jr., presented the annual report of the Medico-Legal Committee:

REPORT OF THE MEDICO-LEGAL COMMITTEE—1936

The secretary of the Medico-Legal Committee hereby submits the annual report for the year 1936. First, we wish to express our thanks to the members of the Committee for their coöperation. Secondly, to the chairman of this committee, Dr. Angus McLean, a special word of thanks for his constant help and wise counsel. We have had many consultations with doctors seeking advice and help. Doctor McLean has been in court several times as an expert where his lifelong experience in surgery has been most valuable. So much of the work is of a confidential nature that it is thought best not to publish it. Many thanks are due Messrs. Herbert Barbour and Clayton Purdy, our attorneys, for their important work in defending our members. Not only do they act as our lawyers but hours have been spent by them in obtaining information and giving legal opinions on matters requested by mem-

bers of our Society. Beside this, Mr. Barbour and Mr. Purdy have contributed articles on medico-legal problems to our State JOURNAL. Mr. Barbour has also addressed several of our county societies on matters along this line. Mr. Barbour's report of the work of his office will be included as part of this report. The thanks of the Committee are also due to Dr. James H. Dempster, editor of our fine JOURNAL, for his fine coöperation. A word of thanks must go to Mr. Wm. J. Burns and Dr. L. Fernald Foster for their coöperation with the secretary. Appreciation also goes to Dr. W. C. Woodward of the Medico-Legal Department of the American Medical Association for his help in special matters pertaining to the work of the committee. This report is divided into the following divisions:

1. List of suits and threats against members for the year 1936. Fifty cases are listed.

2. List of questions asked regarding various phases of medico-legal nature asked by doctors. This list does not include all the questions. There are naturally duplications. Many questions simply required an answer on the phone and no notation was made. It is interesting to see the variety of questions asked.

3. A list of special questions asked which I have called "Studies." They required work by our attorneys and your secretary in looking up cases, consulting the literature and going to the American Medical Association for help from their medico-legal bureau. A glance at this group will be of interest. We felt it best not to publish anything at this time re "dinotrophenol" and "thallium acetate" as there are several cases in the offing. It is felt that serious consequences may result if these cases come to trial.

4. An article on "Malpractice" compiled by your secretary from various sources. We feel strongly that our members should know their rights and liabilities as physicians. We again urge the study of books dealing with the subject. Ignorance of the law is no excuse.

5. Mr. Barbour's report, which explains itself. In passing it is only proper to say that Mr. Barbour and his office have been most generous of their time and knowledge to this committee.

Respectfully submitted,
WILLIAM J. STAPLETON, JR., M.D.,
Secretary.

The report was referred to the County Societies' Committee.

14. *Recommendations from Legislative Committee.*—These were presented by Dr. Burke and discussed by Dr. Cook and others. The various recommendations were referred to the Finance Committee.

The proposed Legislative brochure was approved for Michigan, on motion of Drs. Andrews-Greene, and carried unanimously. The financing of said brochure was referred to the Finance Committee.

15. *Recommendation from Committee Studying Schedules A, B, C, D.*—Dr. Witwer gave a report on the activities of the Michigan State Medical Society-Michigan Hospital Association-Michigan Association of Roentgenologists regarding fee schedules A, B, C and D. Dr. Morrill, President of the Michigan Hospital Association, spoke for a harmonious point of view and stated that with a united front and mutual coöperation of all groups, much could be accomplished for the individual practitioner of medicine. Dr. Burke spoke of Mr. Marsman's plan relative to the elimination of red tape in the Auditor General's office, so that physicians and

hospitals would be paid for medical services given afflicted and crippled children much more promptly. The Council approved Dr. Perry's appointment of Dr. H. S. Collisi of Grand Rapids and Dr. Frank H. Purcell of Detroit to the joint Michigan State Medical Society-Michigan Hospital Association-Michigan Association of Roentgenologists Committee, on motion of Dr. McIntyre, seconded by several and carried.

Group Hospitalization.—Dr. Cook spoke on this subject, mentioning that a subcommittee of the Legislative Committee had been appointed (Drs. Cook, Burke and Hyland) to study this matter and take it up with the Michigan Hospital Association. The President of the Michigan Hospital Association stated that he will accept the American Medical Association recommendations, give them study, and that no conflicts will arise. When the bill is rewritten by the Michigan Hospital Association, Dr. Morrill will get in touch with Dr. Cook's committee.

16. *Recommendations of Committee on Syphilis Control Program.*—Dr. Shaffer reported on the work of this committee:

REPORT OF ADVISORY COMMITTEE ON SYPHILIS CONTROL PROGRAM

(Subcommittee of the Preventive Medicine Committee)

This committee was appointed early in December, 1936, to act in the above capacity at the request of Surgeon General Parran of the United States Public Health Service, asking that each State Medical Society be so organized in relation to a national program aimed at the control of venereal diseases.

The duties of the committee as outlined are: "(a) Review the available information on the syphilis problem in the state; (b) coöperate in assembling necessary additional information concerning the nature and extent of the facilities which now exist for the diagnosis, treatment, and public health control of syphilis; (c) recommend such supplemental and new state and local facilities and measures as seem desirable in dealing with this infection which is nation-wide in its importance and distribution."

The following committee was appointed at the request of Dr. H. E. Perry, president of the Michigan State Medical Society, through Dr. L. O. Geib, chairman of the Preventive Medicine Committee of the Michigan State Medical Society: Dr. L. W. Shaffer, Detroit, chairman; Dr. R. S. Dixon, Detroit; Dr. C. P. Drury, Marquette; Dr. C. R. Hills, Battle Creek; Dr. John Lavan, Grand Rapids, and Dr. Udo J. Wile, Ann Arbor.

Advisers.—Dr. A. P. Biddle, Detroit; Dr. L. O. Geib, Detroit; Dr. C. C. Slemons, Lansing, and Dr. H. F. Vaughan, Detroit.

This committee met in Ann Arbor, Sunday, December 20, 1936 (see minutes of meeting, JOURNAL, M.S.M.S., February, 1937, page 118-119). It is now developing a "Venereal Disease Control Program for Michigan" which it hopes to complete in time for presentation to the Executive Committee of The Council at its February meeting.

Respectfully submitted,
LOREN W. SHAFFER, M.D.

The report was referred to the County Societies' Committee.

MEDICAL WELFARE AND RELIEF

17. *Recommendations from Economics Committee re Relief Medicine Legislation.*—Dr. Pino, chairman of the Economics Committee, reported on:

(a) Relief Medicine legislation, stating that the seventeen points designed by the medical profession had been reduced to five, as follows:

The following are the five points recommended by the Committee on Medical Economics of the Michigan State Medical Society:

1. The conservation and maintenance of the health of the indigent is a necessary function of our government.

2. Medical Care shall include: Home, Office, Hospital Care, Bedside Nursing Care, Dental Care, Pharmaceutical Service, and Undertaking or Burial Service for those families that are receiving relief and those families whose income is on a mere subsistence level.

3. The State Welfare Administration, responsible for the administration of Welfare funds to local relief organizations, shall establish a Division or Department charged with the responsibility of supervising all medical activities herein mentioned, and supervised by a registered and licensed Doctor of Medicine.

4. Each county or district shall have an advisory committee, composed of members of the various professional groups to advise on all disputes, determination of policies, procedures, etc.

5. Hospitalization of the afflicted adult and afflicted child shall be administered through the local welfare unit in each county or district in the same manner as any other form of relief. Uniformity, record forms, and auditing of bills shall prevail throughout the state.

(b) The study of convalescent care, a phase of the hospital problem.

(c) The necessity for recommending a "middle course" to take the place of health insurance.

The report was referred to the County Societies' Committee.

OTHER ACTIVITIES

18. *Director of Medical Relations.*—Dr. Foster reported for Dr. Geib on the probable appointment of a director of medical relations to act as co-ordinator of preventive medical procedures. This was referred to the Preventive Medicine Committee.

19. *Report on Survey of Maternal Health Committee.*—Was presented by Secretary Foster, received and ordered placed on file.

20. *Reports of Other Committees.*—(a) The report of Dr. R. G. Tuck, Chairman of the Liaison Committee with Dentists, Nurses and Pharmacists was referred to the Committee on Medical Economics for study and report back to the Executive Committee. (b) The report of the Liaison Committee with Bar Association was discussed; the matter of arranging joint meetings between the physicians and lawyers was left to the discretion of the Liaison Committee. (c) The reports of other committees were received and ordered placed on file.

21. *Student Health Service.*—Secretary Foster gave a report on this matter, which was discussed by Drs. Burke and Gruber. Motion of Drs. Greene-McIntyre that this question be referred to the Michigan delegates to the A.M.A. to bring up at the 1937 meeting of the A.M.A., and that a letter be written to the Council on Education of the A.M.A. at this time. Carried unanimously.

22. *Meeting with Michigan Conference of Social Work.*—The Executive Secretary was instructed to arrange a meeting in the near future, on a Wednesday, if at all possible.

23. *Transfer of Hillsdale County.*—Dr. McIntyre gave a report of the actions of the House of Delegates in 1935 and in 1936 which was discussed. Motion of Dr. Reeder, seconded by several that the Hillsdale County Medical Society be transferred back to the Second District, as per authority given in Article 5, Section 1. Motion carried unanimously.

24. *Joint Committee on Health Education.*—The proposed change of the name of the Joint Committee on Public Health Education to "Joint Committee on Health Education," as recommended by President Ruthven of the U. of M., was approved on motion of Dr. Andrews, seconded by several and carried unanimously.

25. *An Investigator to Aid the State Board of Registration in Medicine.*—This matter was discussed by Dr. McIntyre; a motion was made by Drs. Carstens-Andrews that Secretary Foster be directed to contact Commissioner of Health Slemmons regarding the necessity of this action, and if possible to finance same out of Social Security funds. Motion carried unanimously.

The necessity for further refresher courses, payable out of Social Security funds as administered by the Commissioner of Health, and by the Crippled Children Commission, was referred to Secretary Foster. It was recommended that the refresher courses be continued, with a larger scope and more territory covered and more money to finance same.

26. *Membership of a Physician Residing in One County and Practicing in Another.*—A letter from Oakland County was presented and discussed by Drs. Baker, Gruber and others. The Council felt that Chapter 9, Section 6 of the By-Laws covered this point, and instructed that Oakland County be advised directly, and that the information be published in the Secretary's Letter and in THE JOURNAL.

27. *Telephone Refund.*—This matter was explained in detail by Secretary Foster, which report was accepted and placed on file.

28. The Council recessed at 11:15 p. m. until 9 a. m. on January 21, 1937.

Third Session of the Council

29. *Roll Call.*—The meeting was called to order by Chairman Urmston on January 21 at 9:00 a. m. All Councilors and officers present at the First and Second Sessions were present at the Third Session; also present were Councilor T. F. Heavenrich, Treasurer Wm. A. Hyland, Drs. T. K. Gruber, Paul A. Klebba and Carey P. McCord.

30. *Minutes.*—The minutes of the Second Session were read and approved.

31. *Committee Studying Admission Policy at University of Michigan Hospital.*—This matter was referred to a committee, Drs. F. T. Andrews and I. W. Greene, to investigate and report to the Executive Committee. The complaint of Dr. M. P. Miller, Trenton, was referred to this committee.

32. *Reference Report of Publications Committee* (Drs. A. S. Brunk, H. H. Cummings, J. E. McIntyre, H. MacMullen and V. M. Moore).

REFERENCE REPORT OF PUBLICATIONS COMMITTEE

The report was presented verbally by Dr. A. S. Brunk, Chairman. The Committee recommended: (a) Approval of the Editor's Annual Report; (b) Recommendation that the problem of Dr. Hasal's advertisement in THE JOURNAL be left to the Secretary and Executive Secretary to settle. The Committee also presented the report of the Publications Committee. The Committee report and its two recommendations were approved and adopted, on motion of Dr. Carstens, seconded by several, and carried unanimously.

33. *Reference Report of Committee on County Societies.*—The Committee report was presented by Dr. I. W. Greene, Chairman, as follows:

REFERENCE REPORT OF COMMITTEE ON COUNTY SOCIETIES

Your Committee had six matters referred to it, and respectfully submits the following report on these items:

- (a) *Report on Councilors' Reports.* These reports show that most Councilors have been active. There is a definite need for a drive for membership in certain counties. The figures presented show that about 20% of eligible physicians are non-members. There are a few small counties that are a problem to arouse. Consolidation or district meetings may be considered in studying their needs. Correspondence should be read but must not be too exhaustive. Business and occasional social meetings should be encouraged. Where "State Society Nights" are impractical, possibly meetings should be arranged with one or two State Society officers present, preferably the Councilor and the Secretary or Executive Secretary.
- (b) *The Secretary's Annual Report.* This was studied by the Committee, paragraph by paragraph, and the Secretary's recommendations were noted. The Committee recommends that the Secretary's Annual Report be adopted, except the one paragraph which makes definite suggestions for a reorganization of State Society Committees: This matter of committee re-organization should be given further study, with recommendations to the House of Delegates. The Committee feels, with reference to necrologies of deceased members, that the county society secretary should be requested to notify the Editor of THE JOURNAL of the M.S.M.S. promptly concerning deaths in his district or county. The Committee also suggests better coordinated programs on "State Society Nights." The Committee suggests that the Executive Secretary write all M.S.M.S. Committee Chairmen asking that they exercise all possible economy in frequency and time of meetings, doing as much work as possible by mail and through the Executive Office.
- (c) *The Report of the Committee on Medical Economics.* Your Committee suggests that this be referred to the Legislative Committee to inculcate the five points of the Economics Committee as part of the Welfare and Relief Commission's proposed bills, and not as a separate medical bill.
- (d) *Report of Syphilis Control Committee.* Your Committee adopts this report, and recommends that a letter be sent by the M.S.M.S. to Surgeon General Parran to the effect that we agree with publicity in this program, but any publicity re treatment should be in the most general terms, and details of treatment are not to be inserted in newspapers; also that any education of physicians be given through refresher courses in coöperation with the State Medical Society. The Committee also believes that in any arrangement for treatment of patients, the physician-patient relationship should be preserved.
- (e) *Report of the Medico-Legal Committee.* Your Committee recommends that we have a more complete report re the number of legal cases handled by the Medico-Legal Committee, how many days our attorneys were in court, how many cases were the joint

responsibility of the State Society and commercial insurance companies, etc. Your Committee also recommends that the matter of transferring the work of the Secretary of the Medico-Legal Committee to the Executive Offices of the State Society in the capital city, in line with the policy of centralizing all State Society Activities in one headquarters' office be deferred to a later date.

- (f) The recommendation of Councilor F. T. Andrews of Kalamazoo that the Kalamazoo Academy of Medicine be urged to arrange a State Society Night was approved, and the Executive Secretary should be authorized to write the Kalamazoo group to arrange such a meeting.

Respectfully submitted,
I. W. GREENE M.D., Chairman,
F. T. ANDREWS, M.D.
WILFRID HAUGHEY, M.D.
ROY H. HOLMES, M.D.
W. A. MANTHEI, M.D.

The committee report was approved, on motion of Drs. Greene-Holmes and carried unanimously.

34. *Reference Report of Finance Committee* (Drs. H. R. Carstens, F. A. Baker, F. C. Bandy, W. E. Barstow, B. H. VanLeuven).

REFERENCE REPORT OF FINANCE COMMITTEE

The Finance Committee reported through its chairman, Dr. Carstens, who discussed the Financial Report for 1936 in detail, and also presented recommendations for the budget for 1937:

SOCIETY BUDGET FOR 1937

Income:	
3,850 members at \$10.....	\$38,500.00
Interest	1,000.00
	\$39,500.00
Less allocation to Journal for sub-	
scriptions (3,850 at \$1.50).....	5,775.00
	\$33,725.00
Appropriations:	
Administrative and General:	
Secretary's Salary	\$ 2,400.00
Executive Secretary's Salary.....	6,000.00
Other Office Salaries.....	3,300.00
Office Rent and Light.....	720.00
Printing, Stationery and Office Sup-	
plies	900.00
Secretary's Letter	200.00
Postage	900.00
Insurance	175.00
Audit	200.00
New Equipment	250.00
Telephone and Telegraph.....	300.00
	\$15,345.00
Society Expenses:	
Council Expenses	\$ 1,800.00
Delegates to the A.M.A.....	400.00
Secretaries' Conference	450.00
General Society Traveling Expense..	1,200.00
Publications Expense	200.00
Reporting Annual Meeting.....	200.00
Other Society Expenses.....	400.00
Contingent Fund	4,000.00
	8,650.00
Committee Expenses:	
Legislative Committee	\$ 3,500.00
Economics Committee	300.00
Cancer Committee	200.00
Preventive Medicine Committee.....	150.00
Radio Committee	25.00
Postgraduate Education	1,200.00
Maternal Health Committee	200.00
Public Relations Committee.....	500.00
Ethics Committee	100.00
Syphilis Control Committee.....	100.00
Medico-Legal Defense Committee	
(3,800 at 50c).....	1,925.00
Other Committees	500.00
Committee Reserve	1,030.00
	9,730.00
	\$33,725.00

BUDGET OF THE JOURNAL, 1937

Income:	
Advertising, less commissions, etc.....	\$ 8,275.00
Subscriptions (3,850 at \$1.50).....	5,775.00
Reprint Profit	150.00
	\$14,200.00
Expenses:	
Printing	\$ 9,500.00
Editor's Salary	3,000.00
Editor's Secretarial Expense.....	600.00
Office Postage	250.00
Other Journal Expenses.....	850.00
	\$14,200.00

Each item of the Society Budget and of THE JOURNAL Budget was discussed individually. After full consideration, motion was made by Drs. Carstens-Bandy that the report of the Finance Committee be adopted and approved. Carried unanimously.

The Secretary was instructed to contact the Joint Committee on Health Education with regard to the possibility of having other cooperating agencies contribute to its funds, as the State Society must pare its budget considerably in all other items during a legislative year.

The Council discussed the bonds of the M.S.M.S., and the Chair appointed a special committee to study the bond situation and to report to the Executive Committee on same. Committee: Drs. Hyland, Carstens, Moore.

The Secretary was further instructed to advise the various committees of the M.S.M.S. of the necessity of conserving funds during 1937 by having fewer meetings, with minor items decided by correspondence. The President-Elect was given the suggestion that he attend as many committee meetings as possible, to aid him with his committee appointments next year, and to ascertain which committees if any should be eliminated.

The Speaker of the House of Delegates, Dr. Reeder, recommended that the high cost of taking stenotype notes of the proceedings of the House of Delegates be cut if possible.

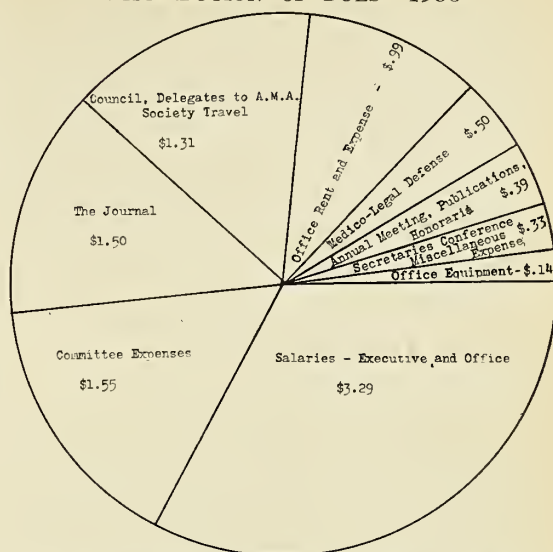
The Council, on motion of Drs. Carstens-McIntyre, appropriated \$1,000 for the current expenses of the Legislative Committee, same to be added to monthly to provide liquid funds for this committee's work, and appointed the President and the Chairman of The Council as a disbursing and auditing committee. Carried unanimously.

35. *Bills Payable*.—Bills payable for the month were presented and ordered paid, on motion of Drs. Carstens-McIntyre and carried unanimously.

CONFERENCE ON OCCUPATIONAL DISEASES

36. *Conference on Occupational Diseases*.—Dr. Paul A. Klebba, Chairman of the Advisory Committee on Study of Occupational Diseases, was called upon for a report of his Committee's activities and to give the background of the proposed "Midwest Conference on Occupational Diseases." Dr. Carey P. McCord also presented the plans for this conference, proposed for May 3, 4, 5, 1937, as part of the program of the American Association of Industrial Physicians and Surgeons which meets in Detroit May 6, 7, 8, 1937. Full discussion ensued, during which the proposed occupational disease bill to be drafted by Attorney Fred B. Collier for Rep. Joseph F. Martin, Jr., was outlined by Dr. Klebba. Motion of Drs. Baker-Heavenrich that the Michigan State Medical Society collaborate intelligently in the matter of the Midwest Conference on Occupational Diseases, scheduled for May, 1937. Carried unanimously. Dr. McCord stated he would look to the M.S.M.S. for speakers, general guidance, etc. The appointment of Dr. Henry Cook to the Advisory Committee on Occupational Diseases was approved

MICHIGAN STATE MEDICAL SOCIETY DISTRIBUTION OF DUES—1936



by The Council on motion of Dr. McIntyre, seconded by several and carried unanimously.

The Council recessed for luncheon from 12:20 p. m. to 1:25 p. m.

ELECTIONS

37. *Election of Secretary*.—Dr. L. Fernald Foster of Bay City was elected as Secretary of the Michigan State Medical Society on motion of Dr. Greene, supported by several and carried unanimously.

38. *Election of Treasurer*.—Dr. Wm. A. Hyland of Grand Rapids was elected Treasurer of the Michigan State Medical Society on motion of Drs. McIntyre-Barstow, carried unanimously.

39. *Election of Editor*.—Dr. James H. Dempster of Detroit was elected as Editor of THE JOURNAL of the State Society, on motion of Drs. McIntyre-Holmes. Carried unanimously.

40. *Appointment of Executive Secretary*.—Wm. J. Burns, LL.B., was appointed as Executive Secretary of the Michigan State Medical Society, on motion of Drs. McIntyre-Barstow, carried unanimously.

41. *Election of Medico-Legal Committee*.—Dr. Angus McLean of Detroit was elected Chairman of the Medico-Legal Committee, on motion of Dr. McIntyre, seconded by several, and carried unanimously. Dr. I. W. Greene of Owosso was elected a member of the Committee, on motion of Drs. Holmes-Carstens and carried unanimously. Dr. Wm. R. Torgerson of Grand Rapids was elected a member of the Committee, on motion of Drs. Holmes-Carstens and carried unanimously. Dr. Wm. J. Stapleton, Jr., of Detroit was elected a member of the Committee on motion of Drs. Reeder-Holmes, carried unanimously. Dr. Dean W. Hart of St. Johns was elected a member of the Committee, on motion of Drs. Holmes-Reeder, carried unanimously. (The Committee elects its own Secretary.)

The Council recommended that the Chairman of The Council and the Chairman of the Medico-Legal Committee meet in the near future to study The Council's recommendations re more reports, more meetings, the savings to be accomplished by transferring the Secretarial work of this committee to the Executive Offices of the Michigan State Medical Society, etc.

42. *Society Correspondence*.—The matter of cutting down the volume of correspondence emanating

from the Executive Offices and going to county society secretaries, members of The Council, and of committees, was discussed. It was recommended that all items be gathered during the course of the month and be sent in *one letter* to the County Society Secretaries. Certain members of The Council felt that meetings of this body should be held occasionally in Lansing.

43. *Adjournment.*—The Chair thanked all the Councilors for their hard work and serious deliberations of the affairs and problems of the Society. The meeting was adjourned, on motion of Drs. Andrews-McIntyre, at 2:00 p. m. on January 21, 1937.

Factors of Resistance in Experimental Poliomyelitis with Comments on Immunity in Poliomyelitis

For the last five years N. Paul Hudson, Columbus, Ohio; Edwin H. Lennette and Francis B. Gordon, Chicago (*Journal A.M.A.*, June 13, 1936), have carried on an experimental study of the factors concerned in resistance to and pathogenesis of poliomyelitis in *Macaca mulatta* (*Macacus rhesus*). A certain degree of resistance was demonstrated in the nasopharyngeal mucosa, although ample evidence was found that pointed to the upper respiratory tract as the portal of entry of the virus. The intestinal mucosa was an effective barrier to infection by virus administered in isolated intestinal loops. Splenectomy seemed to reduce the resistance in two of eleven monkeys and then only when the operation was done before virus injections. In other experiments, virus was found in the spleen in the first twenty-four hours after intravenous or intrasplenic injection. Its disposal in the spleen seemed to depend in part on the contained blood antibodies, since the virus was recovered from spleens of monkeys dying of poliomyelitis only when the organs were perfused. The site of antibody formation was not defined. Neutralizing antibodies were formed in monkeys "vaccinated" with certain preparations, but their presence was not an indication of effective protection of the animals to intranasal virus. Natural or artificially induced menstruation and physiologic maturation of monkeys did not lead to the formation of a demonstrable virucidal property of the blood. Sectioning of the olfactory tracts prevented infection not only after intranasal virus, but also after injections of virus intravenously. The selectivity of the virus for this pathway to the nervous system was further indicated by the recovery of virus from the nasopharynx of other monkeys infected by the blood stream. Sublethal doses were made fatally infective by damage to the cerebral cortex by starch injections, and to certain large peripheral nerve trunks by section. These experiments may be interpreted as meaning that the poliomyelitic infection is primarily and largely of the central nervous system. The virus of this disease enters the body by the olfactory tract, migrates intracellularly through the central nervous system to the loci of predilection in the cord, and sensitizes the nervous tissue in some way so that it is resistant to reexposure to the virus. The virus apparently escapes from the nervous tissues and irregularly invades the body, exciting the defense mechanisms of the body with the stimulation of antibody formation. The neutralizing antibody in the natural condition is thus an indication of specific sensitization by extraneural stimulation after nerve cell migration of the virus. Antibodies induced by the artificial conditions so far devised are not necessarily a measure of nerve tissue resistance. Measures of immunization may well be directed toward the neutral features of the disease.

COUNTY SOCIETIES

CALHOUN COUNTY

WILFRED HAUGHEY, M.D.

Secretary

The February meeting of the Calhoun County Medical Society was called to order by President Brainard at 8 P. M., Tuesday, February 2, 1937, at the Kellogg Hotel following dinner.

The minutes of the last meeting were approved as printed in the *Bulletin*.

The Secretary presented several communications: one from Dr. Clark of the Veterans Hospital regarding Medical Reserve Corps of the Army, a letter from the secretary of the Michigan State Medical Society relative to the Basic Science Law, new membership, malpractice suits, socialization of medicine, the *JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY*, Maternal Health work, the proposed rewriting of poor laws of the state, et cetera. Those appertaining to the work of the Academy were so referred.

The chairman of the Program Committee, Dr. Capron, after a few remarks about future programs, introduced Dr. Bernard Fantus, Professor of Therapeutics, University of Illinois, who spoke on "Treatment of Various Forms of Colitis." He classified the several forms of constipation: (1) Coprostasophobia, (2) rectal stasis, (3) descending colon stasis, (4) proximal colon stasis, (5) colonic stasis spasm, and (6) allergy. He discussed each with the treatment, giving an exhaustive study. There were a number of questions by members and guests. The meeting adjourned at 10:30. Present at dinner, fifty-seven; at meeting, eighty three.

CLINTON COUNTY

T. Y. Ho, M.D.

Secretary

The members of the Clinton County Medical Society were shocked with the announcement at the meeting, on October 27, 1936, of the death of one of the most esteemed and promising young surgeons of this community, Dr. Alton B. Simonson of Elsie, Michigan. Death occurred on October 22, 1936, following an automobile accident, which took place just about a mile south of Elsie.

The routine business of election of officers for the coming year resulted as follows:

President—Dr. A. C. Henthorn, St. Johns, Michigan
Vice President—Dr. W. B. McWilliams, Maple Rapids, Michigan
Secretary-Treasurer—Dr. T. Y. Ho (Re-elected for the 15th term)

Delegate—Dr. D. W. Hart, St. Johns, Michigan
Alternate—Dr. F. D. Richards, DeWitt, Michigan.

Committees were appointed as follows:

Legislative—Dr. D. W. Hart, St. Johns.
Medical-Legal—Drs. Frace, Luton and Russell, all of St. Johns.
Membership—Dr. F. D. Richards, DeWitt, Dr. C. T. Foo, St. Johns.
Censorship—Dr. Luton, St. Johns; Dr. McWilliams, Maple Rapids.
Program—Dr. Henthorn and Dr. Ho, both of St. Johns.

The question of the type of meetings for the ensuing year was discussed. After a short discussion it was decided to have one big meeting, at which one or more outside speakers of prominence in some field of medicine will be invited as guest speakers. At this meeting it was decided to invite members of the adjacent county medical societies. At the other monthly meetings a member of this Society

will be assigned a topic of his own choice to be presented at each meeting. This scheme was adopted some few years ago and found quite interesting. Other members who are not assigned topics for presentation will be asked to discuss the assigned topic. Enough advance notice will be given each member, so that sufficient time will be available for every member to look up material for that particular topic to be discussed.

It will be the duty of our legislative committee chairman, Dr. D. W. Hart, to keep the Society thoroughly informed of the legislative activities of the Michigan State Medical Society so that individual members may act accordingly to the end that organized medicine in Michigan may dwell on a firm foundation.

Our medical legal committee shall handle all possible legal matters that may affect either the Society or members individually. Our membership committee will also endeavor to enlist all eligible members of the profession to be members of some county medical society. Then, finally, the censorship committee shall pass upon the qualifications of a prospective applicant for membership.

The question of drafting a new constitution and by-laws for our Society was discussed. The committee on drafting the constitution and by-laws used the Bay County Medical Society Constitution and By-laws as a model, few minor changes being made to harmonize with local requirements. The drafting as presented was approved unanimously. The secretary was then instructed to forward the Constitution and By-laws to our district councilor for final inspection and suggestion.

* * *

The December meeting of the Society was held at Clinton Memorial Hospital, St. Johns, on December 22, 1936, with Dr. McWilliams presiding in the absence of the president, Dr. A. C. Henthorn.

Minutes of the previous meeting were read and approved. A communication from Dr. A. W. Newett of the Michigan Department of Health requesting all physicians capable of follow-up treatment of patients with artificial pneumothorax and desirous of doing so to file their intentions with the Secretary.

This Society was honored with the presence of our new district councilor, Dr. I. W. Greene of Owosso, Michigan. The opportunity was taken at this time to discuss our proposed new constitution and by laws with the assistance and suggestions of our councilor. The constitution and by-laws were then accepted as presented in their final form, which was essentially patterned after the Bay County constitution and by-laws.

Dr. Greene extended an invitation to this Society to join with the Shiawassee County in a State Society night gathering as a starter in creating society enthusiasm. Dr. Greene's gracious invitation was accepted on motion of Dr. Luton, seconded by Dr. Foo.

The business portion of the meeting was adjourned to reconvene in the dining room, where a very appetizing and enjoyable luncheon was served by the hospital, after which the meeting was adjourned for the evening.

* * *

The January meeting of the Society was held at Clinton Memorial Hospital on January 26, 1937, with Dr. Henthorn, the president, presiding.

Minutes of the previous meeting were read and approved as read. Dr. Dean Hart of the legislative committee reported some rather encouraging facts. He contacted both Senator Fehling of St. Johns, and Representative Espie of Eaton County, and as

far as could be ascertained, Representative Espie would go the limit for the medical profession.

Dr. S. R. Russell discussed briefly a rather interesting case of multiple malignant tumors with pathological fracture in the shaft of the femur. The question of differential diagnosis between multiple myeloma and bronchogenic carcinoma arose. This differentiation was, of course, difficult without a biopsy. This patient died, and unfortunately no autopsy was obtainable.

Dr. F. E. Luton was assigned to speak on a subject of his choice for our February meeting on February 25, 1937.

There being no further business, the meeting was adjourned.

EATON COUNTY

THOMAS WILENSKY, M.D.

Secretary

The Eaton County Medical Society convened at the Carnes Tavern, Charlotte, on the evening of January 28 for its regular monthly meeting. Immediately following dinner the speaker of the evening, Dr. Herbert I. Kallet, Detroit Colo-Proctologist, was introduced by Dr. T. Wilensky, who occupied the presidential chair in the absence of President Moyer who is enjoying the sun of the southland, and Vice-President Myers who is confined to his bed by illness and to whom we extend our heart-felt sympathies and wishes for a speedy recovery.

Dr. Kallet addressed the society on the subject "Diarrhea, With Special Attention to Chronic Ulcerative Colitis." His treatment of this difficult subject was all-inclusive, and the orderly sequence of his considerations was very helpful in assembling a clear cut tabulation of the etiologic factors, in the minds of his audience.

Coming to a more detailed consideration of chronic ulcerative colitis, Dr. Kallet presented an unbiased review of the investigations which have been carried out in an effort to isolate a specific etiologic agent in this most distressing and crippling disease. The speaker described at some length the very careful and brilliant work of Doctors Bargen, Rosenow and associates at the Mayo Clinic where excellent results have been obtained by the use of vaccines and sera developed from the diplostereptococcus isolated from the lesions in over 80 per cent of cases. Clinical and experimental work carried on in the eastern centers has seemed to implicate a preceding dysentery infection, mild or severe, which is followed, after seeming recovery by the typical lesions of ulcerative colitis.

Investigations carried on in the proctological clinics of Detroit by Dr. Kallet and associates have shown surprisingly enough, the presence of the Bargen bacillus and also a significant serologic titer for dysentery organisms in a great number of cases.

In harmony with these seemingly contradictory findings Dr. Kallet has postulated the very logical and entertaining theory to the effect that the dysentery infection prepares the soil, so to speak, for the depredations of the diplostereptococcal invader which is responsible for the typical lesions of ulcerative colitis.

In discussing treatment, Dr. Kallet advised that it is wise and productive of good results, to acquaint the patient with the nature of the malady, its essential chronicity, and he or she must be ever careful to guard against relapse. Actual treatment by means of diet, medication sera, vaccines and surgery was then fully covered. Lantern slides of the roentgenologic and endoscopic appearance of the

colon and rectum in chronic ulcerative colitis, intestinal tuberculosis, multiple polypsis, and diverticulosis were shown as an aid to differential diagnosis.

Following this talk many questions were directed to Dr. Kallet and a vote of thanks was tendered him for the splendid presentation he had brought before the society.

A short business meeting was held followed by adjournment at 10 P. M.

HURON-SANILAC COUNTY

E. W. BLANCHARD, M.D.

Secretary

At the meeting of the Huron-Sanilac Medical Society at Sandusky, January 22, 1937, the death of Dr. Fred C. Wiley of Pigeon was announced and came as a surprise and shock to his colleagues.

A resolution of respect and condolence was drafted:

WHEREAS, it has pleased an All Wise Providence to remove from us by death our honored associate and fellow laborer of many years, Dr. Fred C. Wiley of Pigeon,

WHEREAS, during his practice he was earnestly devoted to the interests, honor and prosperity of the community,

THEREFORE, BE IT RESOLVED that we tender his family our heart-felt sympathy in this great affliction, realizing full well that where so great a sorrow and bereavement as this casts its shadow athwart the pathway of one's life, the worldly consolations are of little avail and that comfort and support can only come from reliance upon the Higher Power, Whose wisdom and beneficence, we may not always clearly discern, but we dare not question or deny and to those inevitable decrees we must submissively bow.

RESOLVED that a copy of these resolutions be sent to Mrs. Wiley and family, and that a copy be furnished the MICHIGAN STATE MEDICAL JOURNAL for publication.

At the annual meeting of the Huron-Sanilac Medical Society, January 22, 1937, the election of officers was as follows:

President—F. O. Kirker, M.D., Sandusky.
Vice President—Roy R. Gettel, M.D., Kinde.
Secretary—E. W. Blanchard, M.D., Deckerville.
Medico-legal Advisor—H. H. Learmont, M.D., Croswell.
Delegate to State Convention—D. D. McNaughton, M.D., Argyle.
Alternate Delegate—W. B. Holdship, M.D., Ubly.

Dr. F. B. Miner of Flint addressed us on "Care of the Newborn."

INGHAM COUNTY

R. J. HIMMELBERGER, M.D.

Secretary

The regular monthly meeting of the Ingham County Medical Society was held at the Hotel Olds, February 16, 1937. Seventy-six members and three guests were at the dinner.

Following the dinner, President Shaw reversed the usual order of business and introduced Dr. Albert M. Snell of the Mayo Clinic, whose subject was "Some Diagnostic Problems in Liver Disease."

Dr. Weinburgh read the budget for the year as approved by the Finance Committee.

The Public Relations Committee through its chairman Dr. Snyder reported that due to the Occupational Disease bill now in the Legislature there

was considerable discussion upon the subject at this time and that there was to be a Conference in May in the City of Detroit upon this question. The Conference is to include the surrounding states and it promises to be an outstanding meeting.

The Preventive Medicine and Public Health Committee through Dr. Stucky made the following report:

It is Dr. Van der Slice's sincere purpose to eliminate communicable disease to the best of his ability with the coöperation of the Ingham County Medical Society and it is the request of the Committee that each member of the Society support his program to the best of his or her individual ability.

With some apology to the Society as a whole, but nevertheless, in a sincere effort to fulfill the purpose of our Committee, the Public Health Committee of the Ingham County Medical Society wishes to request the indorsement of the Society as a whole of certain plans unanimously approved by the Committee. First fully appreciating the difficulties confronting the Director of Health, and further, realizing that he is in sympathy with the ethical practice of medicine and its efforts in the prevention of disease, we wish to submit the following resolutions for consideration by the Society at this time.

However, it was Dr. Van der Slice's original idea that the Society allot a sum of \$2,000 from its general fund to remunerate the individual members of the Society for the administration of various prophylaxes in the field of communicable disease. The Committee did not feel that the Society should remunerate itself for a public health program advocated by the Department of Health of the City of Lansing, but nevertheless, do wish to endorse his program and have submitted the following resolutions:

Resolution Number One

The Public Health Committee of the Ingham County Medical Society endorses any program sponsored by Dr. Van der Slice in an effort to accomplish immunization and prophylaxis against any infectious or contagious disease. Further, it be recommended for approval of the Medical Society as a whole that the resolution to this effect be drawn up and made available to Dr. Van der Slice urging that adequate funds for such a program be set aside from the budget of the Health Department for the accomplishment of such purpose. And that such resolutions be delivered to Dr. Van der Slice for submission to the Board of Health and the common council of the City of Lansing.

Dr. Stucky moved adoption. Dr. Burhans seconded the adoption. Resolution passed.

Next, that the following recommendation of the Director of the Department of Health has been carefully considered; namely, that developing or prodromal stage must be appreciated and the fact reduced were steps taken to avoid undue, social contacts during incubation periods would appear self-evident. It, therefore, was unanimously approved by the Public Health Committee that the following resolution be submitted to the Society as a whole for its endorsement:

Resolution Number Two

The Public Health Committee of the Ingham County Medical Society unanimously endorses a program to minimize the spread of infectious disease in this community and urges that the individual members of this Society coöperate with the Department of Health to the extent that they report all suspected possible cases which might subsequent-

ly fall into this classification immediately upon decision of such possibility in order that warning signs may be placed upon these residences.

Subsequent to accurate diagnosis these warning signs would be removed if no such disease exists, or changed, according to the ultimate diagnosis, the purpose of this recommendation being to avoid the infection of a large number of cases during prodromal periods which might otherwise be obviated.

Dr. Stucky moved adoption. Dr. Miller seconded it. Resolution passed.

We further wish to call to your attention the profound problem of the infectious diseases classified as venereal. It is the purpose of your committee to consider the problems of public health not only from the viewpoint of the public weal, but also from that of the individual practicing physician and we wish to call to your attention that in the past the Surgeon General who preceded Dr. Thomas Parran was profoundly concerned with such devastating afflictions as yellow fever and pellagra and it is to his everlastingly commendable record that these afflictions have been minimized. His successor, Dr. Thomas Parran, has accepted the challenge of the last great plague and in his position as the leading national administrator of health has advocated a program for the establishment of governmental (either national, state, or local) clinics for the control of this problem since individual medical units have made no concerted effort at its control or prevention and have in fact cooperated indifferently with local or State Health Departments.

And further, that the Public Health Committee or the State Medical Society has felt the great necessity of the immediate consideration of this program not only from the viewpoint of the national interest but also from that of the pressing need within our own State and even further that of the ultimate possible embarrassment to the individual physician through his lack of interest in the problem from the viewpoint of the common good.

This State Committee devoted its entire proceedings at its last meeting to the consideration of this problem and has recommended at this meeting of the days previous that the individual physician be best able to handle this problem in general, but nevertheless, the State Committee has found it necessary to admit that such subsidized clinics may be necessary in certain communities within the State. It has become a problem of paramount importance to us from a viewpoint of cooperation with the State Society that some intelligent and constructive program be followed from this point of view. Your Committee has earnestly endeavored, following several meetings subsequent to its very recent appointment, to evaluate opinion of the membership of this Society and wishes to commend those individual members who have responded to the questionnaire recently sent out.

We regret that all members have not replied and have at this time available additional copies of the questionnaire which will be given this evening to those who may possibly have mislaid that originally sent.

At this time we wish to call attention to the fact that all questions listed were carefully considered and that we have requested your individual opinion and answers on each of them. Some of you did answer but omitted one or more questions. To those we may in the future request, if possible, answers to these questions.

To those who have not yet responded, we request for your own individual welfare and that of our Society which has in various fields become a leading Society of the State of Michigan, that you

coöperate with your Committee in an earnest endeavor to evaluate medical opinion in the community.

Do rest assured that these matters are not to be discussed outside of the Committee save in a general analysis and it is paramount that in all fields of medical progress that medicine which has previously led should not relinquish that leadership, nevertheless, in this most important field we are in great danger of doing so.

Dr. Breakey stressed the importance of answering the questionnaires sent out by the Public Health and Preventive Medicine Committee. He stated that if the work was not started by the individual counties that the Federal Government would step in and take charge of the Venereal Disease Control Problem.

Dr. Gailbraith reporting for the Economics Committee stated that seventy-seven children had been hospitalized in the last month. There were six rejections at Mason and the Committee had rejected several. Dr. Gailbraith asked that except in cases of emergency the doctors have the necessary papers made out before the patient is admitted to the hospital and that except in emergency not to operate until the committee has seen the patient.

Dr. Burhans of the Entertainment Committee reported on the Keno Party and the President's Party.

The Sick Committee reported that Dr. R. McGillicuddy and Dr. Ponton were on the sick list. Dr. Breakey reported improvement in Dr. Cushman's condition.

The Secretary then read an announcement of the Ingham County Tuberculosis and Health Society Annual Dinner. There was also an announcement of the Symposium on Anæsthesia at Highland Park Hospital.

A letter from the Michigan Department of Health asking for the registration of physicians proficient in the treatment of pneumothorax was read. These physicians are not to be connected with any sanitarium.

A letter from Dr. E. G. McConnell was read.

The proposed amendments to the by-laws were read as presented to the Society at the last meeting.

Dr. Carr in discussing the amendments stated that it was his impression as well as that of others that the amendment to be added under the duties of the Council be rejected because it was thought that this was a duty of the Finance Committee. He also stated that the Trust Company did not like the idea of having to deal with three groups in the handling of the funds.

Dr. Carr then read some changes that were thought advisable in the amendment under Chapter 2, Section 8.

Dr. Weinburgh then read the amendment with the suggested changes.

He stated that it should be Section 7 instead of Section 8 and that the present Section 7 be changed to Section 8.

Dr. Carr moved the acceptance of the amendment as read by Dr. Weinburgh. Dr. Davenport stated that he thought the original amendments were satisfactory and that the Council should have the say about transferring funds to the Trust Fund as they were an elected body and not the choice of the President. Dr. Bauer stated that as he saw it the amendment as read by Dr. Weinburgh did away with the office of Treasurer.

Dr. Shaw called for a vote on the amendments but as there was not a quorum present no vote was taken and the meeting was adjourned.

IONIA-MONTCALM COUNTY

JOHN J. McCANN, M.D.
Secretary

The January meeting of the Ionia Montcalm Medical Society was held at the Reed Inn, Ionia, with a splendid dinner at 7:00 P. M.

Following the dinner, Doctor Whitten introduced Dr. Merrill Wells to open the program on "Heart Disease." He spoke upon "Heart Failure." He listed causes as: (1) Sudden over-exertion; (2) rheumatic fever, diphtheria, acute infections, chronic infections; (3) thyroid heart; (4) luetic heart; (5) hypertensive heart; (6) coronary disease. He then discussed briefly the treatment of failure in these various conditions.

Dr. Paul Ralph then spoke upon the "Use and Misuse of Digitalis," with an account of the work of Sir William Withering, who introduced foxglove to the English profession in the late eighteenth century.

Dr. R. L. Fitts and Doctor Wells then demonstrated a series of films of various heart conditions.

General discussion and questions followed.

At the business meeting the minutes of the December meeting were read and approved.

Applications of Doctors Marston, Kling and Hansen were accepted, and they were elected to membership.

It was moved and supported that dues for the year 1937 be \$15.00 (State, \$10.00; County, \$5.00), associate members, \$3.50. Carried.

JACKSON COUNTY

H. W. PORTER, M.D.
Secretary

The Jackson County Medical Society held its annual election as usual on the third Tuesday in December, at 4:30 P. M., with the following results:

1937
President—Dr. E. D. Crowley, Jackson
1938
President-Elect—Dr. John VanSchoick, Hanover
Secretary—Dr. H. W. Porter, Jackson
Editor of the Bulletin—Dr. H. W. Porter
Treasurer—Dr. G. R. Bullen, Jackson
Board of Directors—Dr. C. R. Dengler, Dr. J. E. Ludwig, and Dr. H. L. Hurley, all of Jackson
Delegates to M.S.M.S.—Dr. Philip Riley and Dr. J. J. O'Meara, Jackson
Alternates—Dr. H. A. Brown and Dr. C. S. Clarke, Jackson.

LUCE COUNTY

A. T. REHN, M.D.
Secretary

The annual meeting of the Luce County Society was held at the home of Dr. H. E. Perry on December 1, 1936. The officers were all reelected.

President—Dr. George Swanson
Vice President—Dr. C. B. Toms
Secretary-Treasurer—Dr. A. T. Rehn
Delegate—Dr. R. E. Spinks
Alternate—Dr. A. T. Rehn.

The following committees were appointed:

Public Relations—Drs. H. E. Perry, R. E. Spinks, and E. H. Campbell.

Medical Filter Board—Drs. H. E. Perry, G. F. Swanson and R. E. Spinks.

Medical Adviser with Probate Judge—Dr. H. E. Perry.

The annual meeting is always held the first Tuesday in December at the home of Dr. Perry. Our regular monthly meeting is held the first Tuesday of every month excepting in July, August and September.

MANISTEE COUNTY

C. L. GRANT, M.D.
Secretary

Thursday was the date of the retiring President's Dinner for the Medical Society. The afternoon was spent socially, by the members who dropped in as they could. At six o'clock, a dinner of juicy steaks, grilled over a charcoal fire in the fireplace, garnished with French fried potatoes and all the other ingredients necessary for a good dinner, was served. After this an evening of cards topped off a perfect day.

The retiring president, Dr. E. C. Hansen, was the host, and Dr. Harlen MacMullen, councilor, rolled up his sleeves and presided over the fireplace, demonstrating the technic of properly grilling a good steak.

Our system of meeting each Monday noon for an hour and a half is going over strong.

We have a member in our county society who, we think, should receive some recognition—Dr. David A. Jamieson, of Arcadia, Mich. Dr. Jamieson was born at Bowmanville, Ont., December 7, 1865. He attended school in Bowmanville and later taught for four years in the public schools. Coming to the United States, he attended the Detroit College of Medicine and Surgery, graduating in the class of 1894.

That same year he came to Manistee County, locating at Arcadia, and has practiced there continuously, with occasional time out for post graduate work.

He has seen Arcadia through its ups and downs, its lumbering, manufacturing and farming periods. During these forty-three years he has ministered unto his people as only a doctor of the old school can do.

Always he has had the good of his fellow practitioner at heart, always ready with help and counsel. He has been a good member and a worker for his county society. Although living at the far corner of the county, his attendance at society meetings has always been high. A kindly, courteous gentleman, and Manistee County's "Grand Old Man" of medicine. Long may he live.

NORTHERN MICHIGAN

GILBERT B. SALTONSTALL, M.D.
Secretary

The Northern Michigan Medical Society held its annual meeting at the Hotel Perry, Petoskey, on the evening of Thursday, December 10, 1936, with thirteen members present.

Following dinner, President Engle opened the business meeting. The minutes of the November meeting were read and approved. Correspondence received during the month was read and placed on file. The following officers of the Society for 1937 were duly nominated, elected and installed:

President—Dr. E. A. Christie, Cheboygan
Vice President—Dr. F. F. Grillet, Alanson
Secretary-Treasurer—Dr. G. B. Saltonstall, Charlevoix
Delegate—Dr. W. O. Larson, Levering
Alternate Delegate—Dr. F. C. Mayne, Cheboygan.

Dr. Mayne moved that the new officers furnish liquid refreshments for the January meeting. Supported by Dr. Van Leuven, the motion was carried.

Dr. Engle introduced the guest speaker of the evening, Dr. Harold Furlong of Pontiac, who gave an interesting and practical résumé of present day knowledge on "Contraception."

The meeting was then opened to discussion of suggestions for the 1937 Postgraduate Course. It was moved by Dr. Mayne and seconded by Dr. Frank that the Society go on record as being in favor of eight afternoon meetings beginning early in September with two meetings in each of the following cities: Cadillac, Manistee, Traverse City and Petoskey, and that the secretary and councilor write Dr. Bruce accordingly.

Dr. Engle appointed Dr. Christie as program committee for January.

O. M. C. O. R. O. COUNTY

C. G. CLIPPERT, M.D.
Secretary

The regular annual meeting of the O. M. C. O. R. O. County Medical Society was held at Grayling, December 9, 1936, for the purpose of election of officers.

A social half hour was followed by a dinner at the Shopenagon Inn.

At the business meeting the following officers were elected for 1937:

President—Dr. R. J. Beebe, Ogemaw County
Vice President—Dr. M. A. Martzowka, Roscommon County
Secretary-Treasurer—Dr. C. G. Clippert, Crawford County
Delegate—Dr. C. R. Keyport, Crawford County
Alternate—Dr. C. G. Clippert, Crawford County.

Following the business meeting, a presentation of the facts concerning contraception by Dr. Harold Furlong of Pontiac, Michigan, was thoroughly enjoyed by all those present.

ST. CLAIR COUNTY

GEORGE M. KESL, M.D.
Secretary

A regular meeting of Saint Clair County Medical Society was held at the Harrington Hotel, Port Huron, Michigan, Tuesday, January 19, 1937. Twenty nine members and guests attended. Dr. Howard O. Brush, president, called the meeting to order and before he introduced Dr. John A. MacGregor, Professor of Medicine at the Medical School of University of Western Ontario, London, he thanked the committee who had made arrangements for the testimonial dinner given Doctor MacLaren on January 5. President Brush introduced Doctor MacGregor by recalling a previous visit to our Society about six or seven years ago. In his paper on "Some Symptomatic Blood Conditions," Dr. MacGregor stressed the need for routine and repeated blood counts and differential smears calling the attention of his hearers to diagnostic importance of certain of these changes from the normal picture, not to be taken alone but rather as secondary evidence. Discussion followed by Doctors Meredith, Sites, Battley, Waters, Johnson and MacKenzie. Doctor MacGregor closed in the usual manner. Dr. F. E. Ludwig of Port Huron and Dr. C. C. McCue of Goodells were elected to active membership in the Society.

WASHTENAW COUNTY

L. J. JOHNSON, M.D.
Secretary

The Washtenaw County Medical Society held its regular dinner and meeting at the Michigan Union at 5:45 P. M., January 12, 1937, Dr. Reed M. Nesbit, presiding.

The minutes of the December meeting were approved as they appeared in the *Bulletin*.

The Censor Committee reported the following applicants for membership: Drs. Bruce Stocking, Floyd Bays, H. M. Pollard, Myer Teitelbaum, Russell DeJong, Dean Nichols and R. M. Bartlett. All were found qualified and were elected to membership.

The transfer of Dr. Homer H. Stryker from Kalamazoo-Van Buren County Medical Society was accepted and he was elected to active membership in this Society.

Communication from the general secretary of the Michigan State Medical Society regarding delinquent reports from physicians to the Obstetrical Survey Commission was read. An invitation from the Highland Park Maternal Hospital was also read.

An engraved gavel was presented to Dr. Norman Miller by President Nesbit who thanked Dr. Miller for the splendid work performed for our Society during the year of 1936.

The scientific program consisted of a discussion of the treatment of hypertension. Dr. Max Peet discussed the surgical treatment and Dr. George A. Zindler the medical treatment. Dr. Max Peet explained that in the surgical treatment of this disease he performs a bilateral resection of the greater, lesser and least splanchnic nerves. The following results have been obtained: Apparent cure, 15 per cent; marked improvement, 50 per cent; some improvement, 10 to 12 per cent; mortality, 4 per cent. Dr. Peet stated that this operation is counterindicated in patients over the age of fifty years and in those having decompensated hearts or high NPN.

Dr. Zindler discussed the medical treatment of hypertension with sulphocyanate. He pointed out that the drug has been known since 1903 to have hypotensive qualities. It was first used in rather large doses which proved toxic, but when sublethal doses were used and the urine cyanate determined regularly, definite lowering of the blood pressure could be obtained without danger to the patient.

Physiologic Effects of Benzedrine

Myerson, Loman and Dameshek (*Am. J. Med. Sci.*, Oct., 1936) report on the physiological effects of the sympathomimetic amine, benzyl methyl carbinamine ("Benzedrine") in adult humans. Administered parenterally in varying doses the average rise in systolic blood pressure was 29 mm. of mercury. The height of blood pressure was attained in an average time of 46 minutes and reached its normal level 2 to 8 hours after administration. Orally in rather large doses (40 mg.) the blood pressure increases were nearly identical with those after parenteral administration except that the action was delayed. Atropine when combined with Benzedrine markedly enhances its effects. A parasympathetic stimulant, mecholyl, when given with or during the period of Benzedrine action, exerted its depressor effect over a shorter period, temporarily nullifying the action of Benzedrine without being antagonistic to its continued prolonged action. Benzedrine has a definite stimulating action on the central nervous system as shown by the shortening of sodium amyltal narcosis. A marked rise in both white and red blood cells, with a lowering of color index, was usually found. These increases were apparently mechanical and of no clinical significance. The authors state that they did not observe an increase in basal metabolic rate or blood sugar. Reference is made to the good effects of Benzedrine in lowered mood and in certain fatigue states; these are the subject of a separate study, as is the drug's action in relaxing gastrointestinal spasm.

WOMAN'S AUXILIARY

MRS. A. V. WENGER, *President*, 132 Grand Avenue, N. E., Grand Rapids.
MRS. G. C. HICKS, *President-Elect*, 1009 Wildwood Ave., Jackson.
MRS. CLAIRE L. STRAITH, *Vice President*, 19305 Berkley Drive, Detroit.
MRS. FRANK W. HARTMAN, *Press Chairman*, 7440 La Salle Blvd., Detroit.
MRS. CARL F. SNAPP, *Secretary-Treasurer*, 980 Plymouth Road, S.E., Grand Rapids.

PRESIDENT'S LETTER

To county presidents and members, your officers extend greetings.

Although this is the first letter to reach you through *THE JOURNAL* to inform you of the Auxiliary's progress, our year's program has been going forward. On the advice of our national president, Mrs. Fitzgerald, we expect to make organization our chief activity. From reports received at the Secretaries' Conference we have reason to believe that more and more County Medical Societies are looking with favor on the Auxiliary. We are going forward with confidence in our organization program firmly convinced that the number of counties organized will be materially increased.

Should it come to the knowledge of any member or officer that a county decides to organize an auxiliary, kindly advise them to have their County Medical Society adopt a resolution authorizing us to come to that county for that purpose. As soon as the resolution is submitted our organization chairman will have someone in the field to cooperate with the local women. Your officers hope to make this a banner year in extending the geographical scope of the Michigan Auxiliary.

I think it well to point out that our organization activities had been entirely arrested on account of the diversion of the funds for the purpose of absorbing a part of the County dues during the period of the depression. Last year our budget carried an appropriation of only ten dollars for organization purposes. During the same year ten counties reported favorably for organization. Being without funds it was impossible to advance this most important part of our program. Michigan possesses all of the physical characteristics to make it one of the leading states in the number of members and of the counties organized, and in the amount and quality of its productive activities. What is needed is a common worth-while objective or objectives for all units and members to strive for and the will and spirit to reach the desired goal. I am sure the women of Michigan's Auxiliary possess the spiritual qualities to place our State in the front line.

The mid-winter board meeting was held in Grand Rapids on December 8, 1936, with almost a full attendance. The following resolutions were passed: First, To amend the by-laws to provide that all county presidents should be members of the executive board with power to vote; Second, To appoint a committee to revise the constitution and by-laws. The revision committee has the draft of the revised constitution and by-laws prepared and ready for review by the board. It will be presented for adoption at the next annual meeting.

The date for the closing of our books for the year is rapidly approaching. It is my hope that all County Treasurers will make their returns to the State Treasurer in ample time, not later than March 15, 1937, for the State Treasurer to make her returns to the National Treasurer, whose office it must reach not later than April 1, 1937, in order that State and County units and members may be kept in good standing.

It has been said and rightly that the auxiliary is not a money-making organization. This is true only if we have the proper perspective. Certainly



MRS. A. V. WENGER, Grand Rapids
President, Woman's Auxiliary of the Michigan State Medical Society

no great material good can be accomplished without the use of money. No one looks upon our great philanthropic organizations, as for instance the Red Cross, as a money-making organization. Yet it raises and must use vast sums of money without which its existence would be in vain. Our governmental units are not money-making organizations. But who would expect them to operate without money, of which they raise Midas-like sums? Where and when in all history have like sums been raised and expended?

If in the course of the year's activities it is necessary to raise and use funds, let us not feel that our efforts are misdirected because of it. Rather let us feel that it is a privilege to strive for aims that are at least in part philanthropic. Let us find some worthy objective and press forward to its accomplishment.

FANNIE L. WENGER, *President*.
Grand Rapids, February 15, 1937.

THE PRESIDENT-ELECT WRITES

Dear Auxiliary Members:

It gives me pleasure to greet you as auxiliary members at this time. The 1936-37 program is well organized and judging from reports each auxiliary is working with increased enthusiasm and interest.

The first project for the year is to sell in the communities our health service, *Hygiea*. Quoting from Mrs. Fitzgerald, our National President, in the January issue of the news letter: "I am proud of the work we have done with *Hygiea*. The circulation of the magazine is growing steadily. The

women who have directed our cause are to be congratulated, as are the workers in the field." Mrs. J. D. Lester, National Chairman of *Hygeia*, announced the following campaign for subscriptions.

The sum of \$150.00 will be given in cash prizes to the County Auxiliaries securing the largest number of subscription credits to *Hygeia* during the months of December, 1936, and January 1937. The \$150.00 will be divided into three cash prizes of \$50.00 each, namely:

GROUP I, Auxiliaries with a membership of 1 to 49—\$50.00 CASH.

GROUP II, Auxiliaries with a membership of 50 to 199—\$50.00 CASH.

GROUP III, Auxiliaries with a membership of 200 and over—\$50.00 CASH.

A new or renewal one-year subscription will count as one credit; a two-year subscription as two credits; a six-months subscription as one-half credit. In the event of a tie, the county sending the largest number of two- and three-year subscriptions will be awarded the prize.

Each group prize awarded will be based on your quota and the number of subscription credits secured. Your quota is the number of paid-up members in your Auxiliary at the close of our fiscal year for 1935. This arrangement gives the Auxiliary with a small membership an equal chance with the larger ones in their particular group. For example: An Auxiliary that has only twenty members and secures eighty subscriptions would have a rating of 400, and win over an Auxiliary that has thirty members and secures ninety subscriptions with a rating of 300.

Orders should be reported to *Hygeia* Subscription Department, 535 N. Dearborn St., Chicago, on the regular green report blanks. Checks should be made payable to the American Medical Association, and if possible, any commissions should be deducted before the orders are mailed to the Chicago office.

The time of the contest covers the period from December 1, 1936, to January 31, 1937. All orders post-marked on and previous to January 31, 1937, will be counted in this contest.

The prize money in this contest is donated by Mrs. O. McReynolds, past president.

The second project is to study the Basic Science Bill, which is to appear before the Legislature this year. The time has come when a uniform standard of training for those entering the healing arts is imperative. The Medical Society believes that by raising these standards the families of Michigan will be protected by uniform health safeguards. Each Auxiliary member who is familiar with the contents of this bill is prepared to inform lay groups of its purpose. No one can tell just when this opportunity might arrive. Therefore, be prepared.

Our president brought the message from the annual board meeting that the interest and sincerity of Auxiliary members throughout the entire United States cannot be surpassed by any organization. This statement is becoming to those who are organized to benefit the still well chosen profession, the practice of medicine.

Tune in at 5:00 P. M. E.S.T., Tuesday, each week, and hear Dr. Bauer and Dr. Fishbein dramatize health problems. Make it a habit in your community by urging your friends and neighbors to follow your example.

Sincerely,

(Mrs. G. C.) BERNICE HICKS, President-Elect.

MARCH, 1937

A MESSAGE TO DOCTOR HUSBANDS

Dear Doctor:

Is your wife a member of some County Medical Auxiliary? If not, let us consider what would be gained by such membership. In the first place, she should be a well informed person on medical sub-



Photo by D. D. Spellman

Mrs. CLAIRE L. STRATH, Detroit
Vice President, Woman's Auxiliary of the
Michigan State Medical Society

jects in relation to the laity. Some of these subjects are:

Personal and community hygiene.

The administration of local and state health work. Medical and Health laws.

Health of her own community.

Communicable diseases—their prevention and control.

Approved education material; where to obtain it. Development of medical arts.

Why the A.M.A. urges the promotion of hygiene; how done.

What legislation the Medical Society sponsors; why and how an Auxiliary helps.

Philanthropic work related to Medical profession and what an auxiliary can do.

What lay organizations are doing in her community in health.

One of the objects of an auxiliary is to inform, gradually, its members on these subjects so that they can extend authentic information on health to the laity.

Your wife, if she is an informed member of an Auxiliary, has many opportunities in her contact with Women's clubs, church and school organizations and welfare groups, to carry the aims and decisions of the medical profession to the laity and help to keep health leadership where it belongs—with the medical profession.

Now I know in some communities it is difficult to get together even a few busy wives for an extra meeting but, after all, a doctor's wife's interest outside the home and children should be first in her husband's work and anything which can make it

more secure and, above all, more helpful to humanity. I quote Mrs. David S. Long, national chairman of organization:

"Wives of doctors need training in character, training in intellectual poise and training to live the rôle of doctor's wife. She must have patience not only with the interrupted routine of her household but with the ignorance of people, and sympathy not only with sickness of people but with their distorted points of view. How can she mold public opinion unless she has the imagination to understand what is in the minds of people? How can we interpret the medical profession to the laity unless we, ourselves, are informed and intelligent? Study—study not only the present day problems and trends but steep yourselves in the history and traditions of the profession of the past."

There is only one place where one can have the true presentation of medical problems with free discussion and that is at an Auxiliary meeting.

What is the immediate work before the Auxiliary today? Spreading true information about the basic science law. *Your* wife should know what it is, how it affects people who are already practitioners; why Michigan should have one; who reaps the benefit from it; what are the valid objections to it and their answers; what invalid objections are made to it and how to answer them.

As a member of an auxiliary, she can learn these things and, inspired by the enthusiasm of hundreds of women working together, can have a part, however small or large, in the task now before the medical profession of Michigan.

Your medical society needs her help to win this fight.

(Mrs. C. L.) VIRGINIA M. STRAITH.

WOMAN'S AUXILIARY OF THE MICHIGAN STATE MEDICAL SOCIETY

By BLANCHE B. HARTMAN

The Women's Field Army of the American Society for the Control of Cancer has been launched to build throughout the country "an enlightened lay group" through the dissemination of sound material on the methods of cancer control.

The campaign has been endorsed by the National Council of Women, formed in 1888, and has a membership of approximately 5,000,000. It is composed of twenty organizations representing educational, religious, civic, philanthropic and peace movements, including American Homemakers Association, Association of Women in Public Health, General Federation of Women's Clubs, Hadassah, Indianapolis Council of Women, National Association of Colored Women, National Association of Business and Professional Women, National Federation of Music Clubs, National Kindergarten Association, National Motion Picture League, National Women's Christian Temperance Union, National Woman's Party, National Woman's Relief Society, Supreme Forest Woodmen Circle, Women's Benefit Association, Young Women's Mutual Improvement Association.

The army is under way in thirty-eight states, Vice-Commanders, Captains, and Lieutenants are being appointed throughout the country.

Opportunity to fight this dreaded disease described as "the greatest natural hazard of living" presents an unusual challenge to womanhood. Under the slogan "Early Cancer Is Curable; Fight It With Knowledge," every woman in America, especially those closely related to the Medical Profession should enlist in this deciding battle against cancer mortality.

Michigan Off to a Good Start

It is estimated that in Michigan alone hundreds of women have already volunteered their services in the cause of cancer control, and thousands more will be working before enlistment week, March 21-27.

Educational Work

With the educational work which has been done by the State and County Medical Societies and the Women's Field Army, the outlook for this state is decidedly bright.

Luncheon conferences of representatives of the press, radio, State and County Cancer Committees, have been arranged by the Women's Field Army at the Medical Club Rooms in Detroit. Mrs. M. R. Keyworth, club woman, educator, unusual executive ability, has been appointed State Commander. Mrs. H. Wellington Yates, Mrs. Osborne A. Brines, and Mrs. Frank W. Hartman, members of the Wayne County Medical Auxiliary are serving as Vice-Commander, and Captains. Mrs. Yates is contacting all organizations in the Metropolitan area. Mrs. Brines is arranging for speakers, and Mrs. Hartman is handling the publicity in all papers in Metropolitan Detroit as well as Radio publicity.

Message to Governor

At the suggestion of the American Society for the Control of Cancer, Governor Murphy has been requested to proclaim the week of March 21-27 "Fight Cancer Week Throughout the State."

Auxiliary Arranges Mass Meeting

The Woman's Auxiliary to the Wayne County Medical Society will present Dr. William A. O'Brien, Associate Professor of Pathology and Preventive Medicine, University of Minnesota, to address a mass meeting of women in the Statler Hotel, Detroit, Wednesday, March 24, at 2:00 P. M. His subject will be "Women's Contribution to the Cancer Problem." A subscription luncheon to honor Doctor O'Brien will be served at the club rooms of the Medical Society at 12:15 P. M. the same day. Members of the Medical Profession, Women's Auxiliary, and their friends are cordially invited to attend.

Mayor Frank Couzens will be asked to designate Thursday, March 25 as "Fight Cancer Day" in Detroit. On this day under the direction of Mrs. Edwin R. Stroh, and her co-volunteers, the general public will be given an opportunity to join the ranks of this vast army and contribute to its cause.

For the enlightenment for those who may not know, it seems opportune to state Dr. C. C. Little, former President of the University of Michigan, now Director of the Jackson Memorial Laboratories, at Bar Harbor, Maine, is Managing Director of the American Society for the Control of Cancer. Mrs. Grace Morrison Poole, Past President of the General Federation of Women's Clubs, is Chief Adviser of the Women's Field Army.

Mrs. Marjorie B. Illig, National Field Representative of the Women's Field Army, and Chairman of the Health Division of the General Federation of Women's Clubs, stopped in Detroit en route from California and other western states where she had been inspecting the progress of the Women's Field Army.

Buttons—Posters—Dues

Mrs. Illig predicts that soon we will see another crucial drive in progress with red-white-and-blue buttons and posters showing a slender flaming sword, and "Fight Cancer"—Women's Field Army, all over town. Membership fee is \$1.00 and Michigan's allotted quota is \$5,000. Seventy per cent

of the amount collected will be used in Michigan for continuation of the educational program in Michigan under the direction of the State and County Cancer Committees, namely for the state and for the county.

Enlistment week—March 21-27

Was it an accident that Holy Week was Chosen? No, indeed! It was the week before Easter when the hope of the world grew dim, just as until now, most people have held little hope about cancer. Out of the despair of Holy Week came a rebirth of hope and courage, the dawn of a better tomorrow. What better time could we hold our Enlistment Drive with its message of hope than that particular week?

COUNTY AUXILIARIES

Bay County

January 27, at Trinity Parish House, the Auxiliaries of Saginaw, Tuscola, and Midland Counties united in a luncheon meeting. There were sixty-five members present. Dr. Frank J. Clancey, of Seattle, Washington, director of the Bureau of Investigation of the A. M. A., spoke on "Quackery in Cosmetics."

* * *

Kalamazoo

The first meeting of the year for the Kalamazoo Women's Auxiliary was held Tuesday evening, October 21, at the home of Mrs. H. A. Rigterink.

Covers were laid for 31 members at the bountiful coöperative dinner enjoyed at 6:30 P. M. Fall flowers were used for decorating the serving table.

A short business meeting was held. Routine business preceded the report of the State Confab in Detroit which was interestingly given by the delegate, Mrs. Clarke B. Fulkerson.

Mrs. C. E. Boys presented the evening's program. Her hobby is an enviable collection of native dolls, collected in the countries of the world where she has travelled. Preceding the showing of the dolls, Mrs. Boys gave an instructive narrative of the history of dolls and doll making.

The November meeting of the Women's Auxiliary to the Kalamazoo Academy of Medicine was held Tuesday, November 17, at the home of Mrs. C. E. Boys. Mrs. W. O. Jennings was the assisting hostess. Forty-two members and one guest enjoyed the coöperative dinner served at 7:00 P. M. Mrs. John Littig, Mrs. C. H. McIntyre and Mrs. L. H. S. DeWitt were welcomed as new members.

During the evening, Prof. Lemuel F. Smith of Kalamazoo College, gave a talk on his summer's visit to the British Isles.

WILMA G. DOYLE,
Press and Publicity Chairman.

* * *

The Woman's Auxiliary to the Kalamazoo Academy of Medicine was entertained by the Academy at a dinner meeting held December 12, at the Columbia Hotel.

Covers were laid for 125 guests. Individual wrist bouquets and favors were provided. Dr. W. C. Young, the retiring president, delivered his exaugural address followed by a short talk by the incoming president, Dr. W. C. Hoebeke.

Mrs. Claude Fulkerson, president of the Auxiliary, extended greetings, and Dr. William Halnow of the N. Y. A. talked on their activities.

Mrs. R. J. Hubbell was hostess to the Kalamazoo Woman's Auxiliary for the January meeting. Thirty

members enjoyed the coöperative dinner served at 6:30 P. M. Following dinner and a brief business meeting the time was spent in a social manner.

* * *

Kent County

The Women's Auxiliary to the Kent County Medical Society began their activities October 14 with a meeting in the Medical Arts Club Rooms, Grand Rapids.

The officers for the year are:

President	Mrs. Robert H. Denham
President-elect	Mrs. Carl H. Snapp
Vice President	Mrs. Murray M. DeWar
Corresponding secretary	Mrs. Dewey R. Heetderks
Recording secretary	Mrs. W. H. Steffenson
Treasurer	Mrs. J. L. McKenna

Committee chairmen are:

Membership	Mrs. N. W. Shellman
Program	Mrs. Lynn Ferguson
Social	Mrs. Henry J. Vandenberg
Courtesy	Mrs. James S. Brotherhood
Press	Mrs. Wm. J. Butler
Revision	Mrs. A. B. Smith
Public Relations	Mrs. Minor S. Ballard
Hygeia Magazine	Mrs. Paul L. Ralph
Legislation	Mrs. Henry J. Pyle
Welfare and Philanthropic	Mrs. Robert G. Laird
Historian	Mrs. P. L. Thompson

Otto Karl Bach, Director of the Grand Rapids Art Gallery, was guest speaker and gave an interesting illustrated lecture on modern art. The tea was served at the close of the meeting with Mrs. Fred P. Currier and Mrs. T. R. Kemmer as hostesses.

On October 25 a rummage sale was held with Mrs. Robert G. Laird in charge for benefit of *Hygeia* magazine.

On October 30 the Kent County Auxiliary sponsored a dinner dance and bridge at the Morten Hotel.

Our November 11 meeting was held in the Medical Arts Club Room with Dr. A. B. Smith, President of the Kent County Medical Society, as guest speaker, his subject being "Social Problems." A brief extract from Dr. Smith's address follows:

The doctor's wife may be his "blessing or his curse." No decision is more important for the young medical man than whom he shall choose as his helpmate. She can be a great help and a guiding spirit in his practice as it applies to social problems, hence the existence of the Women's Auxiliary. Doctors generally should more fully appreciate the possibilities of their wives as an organized body in activities that they themselves may not in good taste undertake.

Also their influence can be of material help in furthering desirable legislation and in circumventing undesirable enactments, both in voting and in molding opinion through education by contacts with lay groups of women in clubs, voters leagues, P. T. A.'s, and other lay organizations where study committees may be organized for study of proposed bills affecting the profession, such studies being made as public welfare.

That the doctors have an interest in public welfare is amply attested in that their annual contribution to this cause in service amounts to \$365,000,000. The many social welfare and social service activities which affect medical practice open greater and wider fields of usefulness for auxiliary bodies not only on the side of altruism but in so educating and molding public opinion that through it doctors shall at last receive their just material as well as altruistic benefits for these services. A right that has been traditionally denied them since the days of the Druid priest and the beggar at the city's gate.

On December 9 an open meeting of the Auxiliary was held in the Medical Arts Club Rooms to sponsor a play reading and tea, the proceeds to be used in placing *Hygeia* magazine in the public schools. Two plays were read from Noel Coward's recent book, "Tonight at Eight-thirty." They were "Ways and Means" and "We Were Dancing."

(Mrs. Wm. J.) LUIDA I. BUTLER
Press Chairman

(County Auxiliaries continued on page 208)

MICHIGAN'S DEPARTMENT OF HEALTH

C. C. SLEMONS, M.D., Dr.P.H., Commissioner, LANSING, MICHIGAN

LABORATORIES APPROVED FOR SERODIAGNOSIS OF SYPHILIS

The Michigan Department of Health is required by Act 45, P.A. 1931, to check the accuracy and dependability of all public laboratories making chemi-

cal, serological, or bacteriological laboratory tests to aid in the diagnosis and control of communicable diseases.

The following public laboratories have complied with the regulations and have been approved for the serodiagnosis of syphilis as of January 28, 1937:

REGISTERED LABORATORIES IN MICHIGAN APPROVED FOR THE SERODIAGNOSIS OF SYPHILIS

<i>Reg. No.</i>	<i>Name of Laboratory</i>	<i>Location</i>	<i>Supervisor</i>
202	Emma L. Bixby Hospital	Adrian	Bernhard Steinberg, M.D.
5	St. Joseph Mercy Hospital	Ann Arbor	S. C. Howard, M.D.
6	University of Michigan Hospital	Ann Arbor	R. L. Kahn, Sc.D.
175	Chemical & Bacteriological	Battle Creek	Wm. Rothberg, B.S.
11	Leila Y. Post Montgomery Hosp.	Battle Creek	A. A. Humphrey, M.D.
70	Nichols Memorial Hospital	Battle Creek	C. E. Roderick, M.D.
9	Sanitarium	Battle Creek	Paul Roth, M.D.
13	Health Department	Bay City	L. B. Harrison, M.A.
14	Mercy Hospital	Bay City	W. G. Gamble, M.D.
191	Gamble Clinical	Bay City	W. G. Gamble, M.D.
170	Mercy Hospital	Benton Harbor	H. L. Galehouse, B.S.
166	Dearborn Clinical	Dearborn	C. A. Christensen, M.D.
183	Ford Motor Co. Medical	Dearborn	B. D. Campbell, M.D.
1	Health Department	Detroit	J. A. Kasper, M.D.
195	Brooks	Detroit	C. D. Brooks, M.D.
162	Buesser	Detroit	F. G. Buesser, M.D.
203	Central Laboratories	Detroit	J. A. Wolf, B.S.
100	Clark Clinical	Detroit	H. L. Clark, M.D.
140	Chas. Godwin Jennings Hospital	Detroit	S. W. Wallace, M.D.
184	Chenik Hospital	Detroit	O. A. Brines, M.D.
18	Children's Hospital	Detroit	M. K. Patterson, M.D.
17	Delray General Hospital	Detroit	H. E. Cope, M.D.
164	Detroit Endo. & Clinical	Detroit	I. J. Zimmerman, M.D.
185	Detroit Polyclinic	Detroit	Eveline M. Purdon, B.S.
189	East Side General Hospital	Detroit	O. A. Brines, M.D.
201	East Side Medical	Detroit	R. I. Greenidge, M.D.
198	Ellwart Clinical	Detroit	D. L. Drummond, M.D.
113	Evangelical Deaconess Hospital	Detroit	A. B. Pranian, B.S.
156	Fairview Sanatorium	Detroit	R. I. Greenidge, M.D.
136	Florence Crittenton Hospital	Detroit	A. L. Amolsch, M.D.
21	Grace Hospital	Detroit	C. I. Owen, M.D.
73	Harper Hospital	Detroit	P. F. Morse, M.D.
176	Havers	Detroit	H. Havers, M.D.
22	Henry Ford Hospital	Detroit	F. W. Harman, M.D.
188	Jefferson Clinic	Detroit	O. A. Brines, M.D.
199	Jordan Clinical	Detroit	H. M. Harrington, M.D.
142	Medical Clinical	Detroit	N. E. Aronstam, M.D.
177	Michigan Bell Telephone Co.	Detroit	W. E. Bennett, M.D.
180	Michigan Diagnostic	Detroit	R. J. Scott, M.D.
24	National Pathological	Detroit	F. J. Eakins, M.D.
157	Nottingham Clinical	Detroit	H. B. Ainslie, B.A.
25	Owen Clinical	Detroit	R. G. Owen, M.D.
88	Parkside Hospital	Detroit	R. I. Greenidge, M.D.
26	Physicians' Service	Detroit	M. S. Tarpinian, B.S.
27	Providence Hospital	Detroit	J. E. Davis, M.D.
28	Receiving Hospital	Detroit	O. A. Brines, M.D.
31	St. Joseph Mercy Hospital	Detroit	D. G. Christopoulos, M.D.
32	St. Mary's Hospital	Detroit	J. E. Davis, M.D.
76	Schaefer	Detroit	R. L. Schaefer, M.D.
181	Stafford, Frank	Detroit	Frank Stafford, M.D.
196	Stafford, Biological	Detroit	C. M. Stafford, M.D.
117	Woman's Hospital	Detroit	D. C. Beaver, M.D.
97	Seymour Hospital	Eloise	S. E. Gould, M.D.
36	Hurley Hospital	Flint	G. R. Backus, M.D.
209	St. Joseph Hospital	Flint	G. R. Backus, M.D.
112	Women's Hospital	Flint	G. R. Backus, M.D.
2	West. Mich. Div., Mich. Dept. Health	Grand Rapids	Pearl Kendrick, Sc.D.
167	Allergic & Clinical	Grand Rapids	H. G. Swenson, M.D.
38	Blodgett Memorial Hospital	Grand Rapids	W. M. Gorman, M.D.
40	Brotherhood Private	Grand Rapids	J. S. Brotherhood, M.D.
37	Butterworth Hospital	Grand Rapids	W. P. L. McBride, M.D.
192	Hufford	Grand Rapids	A. R. Hufford, M.D.
42	Western Michigan Clinical	Grand Rapids	T. L. Hills, Ph.D.
41	St. Mary's Clinical	Grand Rapids	G. L. Bond, M.D.
116	Cottage Hospital	Grosse Pointe	P. F. Morse, M.D.

MICHIGAN'S DEPARTMENT OF HEALTH

<i>Reg.</i>			
<i>No.</i>	<i>Name of Laboratory</i>	<i>Location</i>	<i>Supervisor</i>
94	Health Department	Hamtramck	P. A. Klebba, M.D.
44	General Hospital	Highland Park	P. F. Morse, M.D.
3	Upper Pen. Div., Mich. Dept. Health	Houghton	Ora M. Mills, B.S.
193	Itzov Clinical	Iron Mountain	Theo. A. Itzov
186	W. A. Foote Memorial Hospital	Jackson	J. H. Ahronheim, M.D.
47	Public Health Department	Kalamazoo	George White, A.B.
46	New Borgess Hospital	Kalamazoo	H. R. Prentice, M.D.
91	Bronson Methodist Hospital	Kalamazoo	H. R. Prentice, M.D.
0	Michigan Department of Health	Lansing	C. C. Young, D.P.H.
163	Larkum Clinical	Lansing	N. W. Larkum, Ph.D.
69	St. Lawrence Hospital	Lansing	C. D. Keim, M.D.
134	St. Luke's Hospital	Marquette	Josephine Galloway, B.S.
141	Diagnostic Clinic	Monroe	C. J. Golinvaux, M.D.
104	Mercy Hospital	Monroe	R. W. McGeoch, M.D.
187	Monroe Hospital	Monroe	S. Long, M.D.
51	Macomb County	Mt. Clemens	S. J. Peltier, M.S.
50	St. Joseph Hospital	Mt. Clemens	Isabella Kennedy, B.S.
53	Hackley Hospital	Muskegon	E. W. Lange, M.D.
54	Mercy Hospital	Muskegon	A. A. Spoor, M.D.
118	Pawating Hospital	Niles	Alice Gracy, M.D.
111	Wm. H. Maybury Sanatorium	Northville	C. E. Woodruff, M.D.
107	Memorial Hospital	Owosso	I. W. Greene, M.D.
56	Dept. Health, General Hospital	Pontiac	C. A. Neafie, M.D.
57	Oakland County Health	Pontiac	Clara Diekman, B.S.
128	Pontiac State Hospital	Pontiac	R. E. Olsen, M. D.
200	Port Huron Hospital	Port Huron	Irene Dexter, B.S.
58	St. Clair County	Port Huron	Lucile Roach, B.S.
83	Health Department	Roseville	F. T. Zieske, M.D.
59	Central Laboratory	Saginaw	O. W. Lohr, M.D.
108	Clinton Memorial Hospital	St. Johns	T. Y. Ho, M.D.
168	Hart Clinic	St. Johns	T. Y. Ho, M.D.
182	Sturgis Memorial Hospital	Sturgis	D. M. Kane, M.D.
62	Traverse City State Hospital	Traverse City	R. P. Sheets, M.D.
63	General Hospital	Wyandotte	C. M. Crum, B.S.
150	Ypsilanti State Hospital	Ypsilanti	Aileen L. MacKenzie, M.D.

LABORATORIES IN MICHIGAN CHECKED FOR THE SERODIAGNOSIS OF SYPHILIS— REGISTRATION PENDING

<i>Reg.</i>			
<i>No.</i>	<i>Name of Laboratory</i>	<i>Location</i>	<i>Supervisor</i>
	Sullivan Laboratory	Flint	Helen Sullivan, B.S.
	Health Department	Jackson	E. J. MacLachlan, D.V.M.
	Morgan Heights Sanatorium	Marquette	Richard V. Tysdale, M.D.
	Newberry State Hospital	Newberry	W. R. Purmort, M.D.

COMMUNICABLE DISEASE REVIEW FOR 1936

For the year 1936 the incidence of communicable diseases as a whole has been favorable. There occurred but a small number of cases of measles and relatively little poliomyelitis as compared to the previous year. The number of cases of typhoid fever reported was about 15 per cent less than the number reported for 1935. There have been some increases in the number of reported cases of tuberculosis, diphtheria, whooping cough, scarlet fever, smallpox and meningitis. An analysis of these figures, however, indicates that the increases are either slight and not significant, or a probable explanation is better reporting for each disease.

The number of reported cases of tuberculosis for 1936 is 5,087 compared to 4,832 for 1935. The in-

crease is slight and may be due in part to better reporting.

A total of 656 cases of diphtheria were reported in 1936, while 638 were reported in 1935. This increase is not significant except that it is in keeping with the downward trend of the last decade.

The incidence of diphtheria is but a small fraction of what it was ten years ago. In certain sections of the state diphtheria has continued relatively high since January 1 of this year, and this failure of decline should act as a warning for health officers and physicians to be on the alert. Further activity in the immunizing of young babies is needed.

There was reported in 1936 a total of 14,152 cases of whooping cough. This is an approximate increase of 10 per cent over the incidence of 1935, while, on the other hand, there was a decrease in the number

of deaths from this disease in 1936. The explanation lies in the fact that there has been an increase in the number of full-time county health units in operation. The number of cases reported in organized units is approximately three times as many as that in counties not organized. Thus, a true index of the incidence of whooping cough, as well as several other reportable diseases, is the number of deaths.

In 1936 there were 12,586 cases of scarlet fever reported as compared to 11,849 in 1935. No doubt this slight increase is more than accounted for by better reporting brought about by the establishing of county health departments as explained for whooping cough. However, beginning with the winter season of 1936-1937 there has been a decided increase in scarlet fever as compared with corresponding months for the previous year. This increase has become more noticeable since the first of January, and at the present writing indications are that the incidence is considerably higher than the five year average for the state. This is the only disease in which this situation is evident.

There were 33 cases of smallpox reported for 1936, while there were only 21 for 1935. These figures indicate an extremely low incidence in both years. Diagnosis is often questionable although it is known that there have been some typical cases where there was no doubt.

The incidence of meningococcic meningitis has been practically at a standstill for two years. However, this level is about twice that of the low incidence for 1934 when there were only 53 cases reported.

For the year 1936 there were reported 12 cases of lethargic encephalitis, 25 cases of amebic dysentery, 82 cases of malaria, 88 cases of undulant fever, 38 cases of trichinosis, 7 cases of trachoma and 10 cases of ophthalmia neonatorum.

TRICHONISIS OUTBREAK

An outbreak of trichinosis of not less than 65 cases occurred in a small community of eastern Michigan during the month of December. At least five deaths occurred in which there was trichinosis, although in two or three of them other conditions such as cerebral hemorrhage and appendicitis were factors in the fatality.

During the first part of the outbreak cases were diagnosed as influenza, typhoid fever and intestinal infections. When it became apparent that here was something unusual, the Michigan Department of Health was notified. Epidemiologists have been making a thorough study of the outbreak and a written account will be published.

Recent investigations show that trichinosis is not as rare as usually considered. Studies made among rural communities indicate that from ten to fifteen per cent of the population have trichinosis at some time.

During the last few years there have been a number of very good articles on this subject. We mention only two:

Wesley W. Spink, M.D., and Donald L. Augustine, Sc.D., The Diagnosis of Trichinosis, *Journal of the American Medical Association*, Vol. 104, 1935, p. 1801.

George Blumer, M.D., Trichinosis, with Special Reference to Changed Conceptions of the Pathology and their Bearing on the Symptomatology, *New England Journal of Medicine*, Vol. 214, 1936, p. 1229.

LOCAL REGISTRATION OF BIRTHS AND DEATHS IMPROVED

As an aid to full time local health departments in checking the registrations of births and deaths within their jurisdiction, the Bureau of Records and Statistics has arranged to route such statistics directly through the local health officer in ten of the organized counties. Under this system the local registrar

of vital statistics will send his birth and death registrations to the local health officer on the fourth of each month rather than directly to the State Department of Health. The local health officer then transmits the registrations to the Bureau of Records and Statistics by the tenth of the same month. The physician's part in this new system does not change; he will continue his registrations with the local registrar.

The new system of registration in these ten counties was devised in order that the local health department may have a more immediate knowledge of health conditions. Reports of communicable diseases are already being filed through the local full time health officers, who in turn file these daily with the Bureau of Records and Statistics.

No county is included under this new setup unless sufficient clerical assistance is available for the immediate and advantageous handling of registrations. The first county to be so organized was Eaton more than a year ago. Successful operation of the plan there led to its inauguration in Oakland, Barry, Allegan, Branch and Midland counties. During the past month Saginaw, Genesee, Hillsdale and Calhoun counties have been thus organized.

ASSISTANCE GIVEN FLOOD VICTIMS

The Michigan Department of Health came to the aid of health authorities in the flood stricken areas of the Ohio river valley with supplies of typhoid fever vaccine needed to offset the threatened outbreaks following the pollution of most of the available water supplies. A shipment of 10,000 c.c. of vaccine has been rushed to Red Cross Headquarters at Evansville, Indiana, to be followed by additional amounts just as soon as it can be packaged at the department's biologic plant. It is estimated that 90,000 c.c. can be made available for the health agencies of Ohio, Indiana, Kentucky, Tennessee and other threatened areas.

A chlorofeeder diaphragm pump capable of chlorinating and providing a safe water supply for a small village has been shipped to health authorities at Nashville, Tennessee. With the subsiding of the flood sanitary engineers will be in great demand to aid in rehabilitating water supply and sewerage systems. The United States Public Health Service is organizing this service and has requested the Michigan Department of Health to cooperate. Three sanitary engineers from the Bureau of Engineering have been detailed to the flood zone.

Summer Romance—Although they had known each other only three days, they had to part.

"Come along," shouted the guard, but the young man still held her hand.

"It'll be terrible without you," he sighed.

"And I'll miss you, too," she said. "I was never so happy before, and all because we met three days ago."

"Stand away there!" shouted the guard.

"You'll write," she shouted from the window.

"Every day." Then suddenly he tore after the train, and as he almost overbalanced on the extreme edge of the platform he made a trumpet of his hands and cried: "Darling! Darling! What did you say your name was?"—*London Opinion*.

Effective Advertisement—Letter from dentist: "Dear madam: Unless the denture you had from me is paid for without delay, I shall be obliged to insert the following advertisement in the local paper: 'Excellent set of false teeth for sale. To be seen at any time at Mrs. Smith's, 5 Dettone Terrace.'"

The teeth were paid for the same day.—*Hamilton Spectator*.

IN MEMORIAM

Dr. Fred Burke

It is inevitable that from time to time there must be suffered the loss of our loved ones. Little can be done or said to assuage the sadness of these occasions. In the case of Dr. Fred Burke, who was near and dear to all our hearts, there is an added sense of tragedy because he was president-elect of the Society and about to be inaugurated as our chief executive. It is seldom that an organization had a man so well qualified for this office. Fred Burke worked hard for his fellow physicians during his entire medical lifetime. His heart and soul were in the Society. He understood its mechanism, activities, and its precedents. He knew the men and what they wanted. At the time of his death he was laboring on several projects of extreme importance to the medical profession. It is hoped that the fruition of his efforts will materialize soon as a living monument to his memory. Let us carry on the work and ideals of Fred Burke.

T. K. G.

Dr. A. W. Crane

Dr. A. W. Crane, of Kalamazoo, died suddenly at his home, on February 20, 1937. He was born at Adrian, Michigan, on November 15, 1868. Educated in the literary department of the University of Michigan, and also in the medical department of the University, he was graduated in 1894, when he located in Kalamazoo and engaged in general practice for twenty years. He had specialized as a diagnostician since 1915. Dr. Crane was one of the most prominent physicians of the present day; a most profound scholar, his great ability was early recognized not only in this state but throughout the nation. His memberships in scientific societies were many. He was one of the earliest to see the future in roentgenology and set to work soon after the discovery of the x-rays to study and expand their utility as a diagnostic agent in medicine. He was appointed a member of the National Research Council in 1919. He was acting editor of the *American Journal of Roentgenology*, 1917 to 1918. Dr. Crane was awarded the gold medal in 1921 of the Radiological Society of North America in recognition of his achievement in the science of radiology. He had been a member of the London Roentgen Ray Society since 1899, a member of the American Roentgen Ray Society and its president in 1916. He was also a member of the Radiological Society of North America. Dr. Crane was president of the Kalamazoo Academy of Medicine in 1908. A clinician of national recognition, Dr. Crane showed unusual ability in the matter of research connected with his chosen specialty.

As a writer and contributor to literature of roentgenology, Dr. Crane had few equals. The Detroit X-ray and Radium Society established a lecture in honor of the late Dr. Preston M. Hickey, another pioneer in roentgenology. Dr. Crane was selected to give the first Hickey lecture which was his last appearance before a medical audience, the Wayne County Medical Society, in February, when he traced the history of roentgenology from the early contribution of Gilbert on electricity and magnetism and the evolution of that co-necessity to the production of x-rays, the vacuum tube. In 1932, his alma mater conferred upon him the honorary degree of Master of Arts. Never has an

honorary degree been so well deserved. Dr. Crane was married in 1896 to Caroline Bartlett, who died as suddenly, two years ago. He was a member of the Kalamazoo Academy of Medicine, the Michigan State Medical Society and the American Medical Association.

Dr. Thomas O. Menees

Dr. Thomas O. Menees of Grand Rapids died suddenly, February 14th. Dr. Menees was born at Nashville, Tennessee, forty-seven years ago. He received his early education in Nashville and attended the Vanderbilt University where he was graduated M.D., in 1907. Following his graduation he went to the Belgian Congo, South Africa, as a medical missionary. He served as roentgenologist with the rank of lieutenant during the World War. Up to the time of his death, he was director of the x-ray department of Blodgett Memorial Hospital, Grand Rapids. He is survived by his wife and two sons, Leo and James. Dr. Menees was a member of the Kent County and Michigan State Medical Societies.

Dr. Robert F. Shinsky

Dr. Robert F. Shinsky of Detroit died on February 2 after a week's illness of septicemia which originated in an infected hand. Dr. Shinsky was born in Saginaw in 1887. He was educated at the University of Michigan and the Detroit College of Medicine. He graduated in 1920 and has practiced in Detroit since his graduation. He is survived by his wife. Dr. Shinsky was a member of the Wayne County Medical Society and the Michigan State Medical Society.

Dr. Herbert J. Wing

Dr. Herbert J. Wing of Hartford, Michigan, died of pneumonia at Mercy Hospital, Benton Harbor, November 8, 1936. Dr. Wing was thirty-two years old. He was graduated from the University of Illinois Medical School and spent his internship in the Lakeview Hospital, Chicago. Dr. Wing practiced in Chicago three years before going to Hartford, where he practiced about a year. He took over the practice of the late Dr. John D. Stewart. Dr. Wing was married in 1932 to Miss Louise Garrison of Birmingham, Alabama. He is survived by his wife and one son, eighteen months old. Dr. Wing was a member of the Van Buren County Medical Society, Michigan State Medical Society and American Medical Association. His passing, after a brief illness, cuts short what had bid fair to be a promising career in his chosen profession.

Treatment of Encapsulated Brain Abscess

Edgar A. Kahn, Ann Arbor, Mich. (*Journal A. M. A.*, Jan. 9, 1937), outlines a procedure by which a chronic encapsulated brain abscess can be dealt with more easily. He has shown in his four cases that a brain abscess can migrate to the surface beneath a decompression, in the presence of increased intracranial pressure. In most cases of encapsulated abscess there is nothing to prevent their changing position under certain pressure conditions. Could all abscesses be drained at the surface under circumstances which would minimize the possibility of meningitis, the mortality would undoubtedly diminish.

◆ General News and Announcements ◆

The One Hundred Per Cent Club of the Michigan State Medical Society:

1. Clinton County Medical Society
2. Eaton County Medical Society
3. Luce County Medical Society
4. Manistee County Medical Society
5. Muskegon County Medical Society
6. Newaygo County Medical Society
7. Oceana County Medical Society
8. Ontonagon County Medical Society
9. Schoolcraft County Medical Society
10. Tuscola County Medical Society

The above County Medical Societies have paid dues in full for each and every member of the County and State Medical Society. A number of other County Societies lack but a few, sometimes only one or two, of being One Hundred Per Cent. Have YOU paid your dues?

Dr. L. Fernald Foster of Bay City gave a talk on "County Health Units" February 24 to the Bay County Social Workers.

Dr. F. D. Richards of DeWitt gave a talk on Mental Hygiene to the local Parent-Teacher Association February 25.

Dr. A. A. Steiner of Wacousta gave a talk on "Socialized Medicine" before the "Wacousta Circle," a woman's club, on February 9, 1937.

"Arctic Foods and Diets" was the subject of an address by Vilhjalmur Stefanson, Arctic explorer, before the Genesee County Medical Society on February 19th.

The Parent-Teacher Association of Saginaw will hear Dr. L. Fernald Foster of Bay City talk on "What Do We Ask of Health Agencies?" at its meeting of April 15.

The Lenawee County Medical Society is planning a "State Society Night" for Tuesday, June 15, 1937. Dinner will be held at the Lenawee Hotel in Adrian at 6:30 p. m.

Dr. L. Fernald Foster of Bay City will be guest speaker at the meeting of the Exchange Club of Saginaw on April 6, 1937. His subject will be "State Medicine."

A Tri-County meeting of the Bay, Saginaw, and Genesee County Medical Societies will be held in Frankenmuth on March 10, 1937. The hosts will be the Saginaw Valley Academy of Ophthalmology and Otolaryngology.

Dr. Harold W. Wiley of Lansing spoke before the Ionia-Montcalm County Medical Society in Belding on March 9, 1937. His subject was "Modern Conceptions of Maternal Health" which he illustrated by motion pictures.

"The Medical History of Michigan"—see the editorial on page 171 relative to this two-volume

history which now sells for \$3.00 (for both volumes). Only a few score sets remain, and it is advisable to order now, through 2020 Olds Tower, Lansing.

Dr. Henry E. Perry, President of the Michigan State Medical Society, addressed the Business and Professional Women's Club of Jackson on Tuesday, February 23, at the Hayes Hotel, Jackson. The title of his address was "Medicine of Today and Tomorrow."

Dr. W. E. Ward of Owosso, who has served the Shiawassee County Medical Society as Secretary-Treasurer for twenty-five years, resigned at the recent annual election of officers. Doctor Ward graduated from the University of Michigan in 1883, and has been in continuous practice ever since.

The Kansas Medical Society and its Executive Secretary, Clarence Munns of Topeka, Kansas, are thanked for their courtesy in aiding the Legislative Committee of the Michigan State Medical Society with the material for its booklet "Michigan Needs a Basic Science Law."

Grand Rapids will be the host city for the Seventy-second Annual Meeting of the Michigan State Medical Society, which will be held September 27, 28, 29, 30, 1937. Plan now to attend this interesting and educational convention. It will pay you big dividends.

Dr. J. Earl McIntyre of Lansing, secretary of the Michigan State Board of Registration in Medicine and Councilor of the Second District, was elected vice president of the Federation of State Boards of Medicine of the United States. The meeting was held at the Palmer House, Chicago, February 16, 1937.

We acknowledge with thanks the courtesy of the General Electric Sun Lamp Company, Bridgeport, Connecticut, for loaning to the Michigan State Medical Society an electrotype plate of a healthy laughing baby, which illustration was placed on the cover of the Legislative Committee's brochure "Michigan Needs a Basic Science Law."

Dr. C. D. Brooks of Detroit has been appointed as Chairman of the Committee on Local Arrangements for the meeting of the American Association for the Study of Goiter which will be held in Detroit June 14, 15, 16, at the Book-Cadillac Hotel. The members of the Michigan State Medical Society will be welcome as guests at this meeting.

The Bulletin of the Genesee County Medical Society is publishing each month an installment of local medical history. The February number contains a biography of Dr. Bela Cogshall (1842-1914). The Kalamazoo Gazette is also covering a similar field under the general title of "Reminiscences," written by Dr. Rush McNair of Kalamazoo.

Dr. H. W. Porter, Jackson, has been appointed Chairman of the Ethics Committee of the State Society by President H. E. Perry. President Perry also appointed Dr. Leo H. Bartemeier, Dr. J. W. Hawkins, and Dr. Wm. E. E. Tyson, all of Detroit,

to the Legislative Committee. Dr. Harold L. Morris of Detroit has been appointed to the Public Relations Committee.

* * *

A bi-monthly didactic psychiatric seminar is conducted at the Eloise Hospital for the training of residents in psychiatry. At each meeting a systematic paper is presented followed by organized discussion. On alternate weeks a Psychiatric Journal Club meets for the presentation and discussion of original papers, general psychiatric topics and reviews of current literature.

* * *

The Clipping Loan Collection Service at the A.M.A. headquarters, 535 North Dearborn Street, Chicago, is available to medical speakers invited to address lay groups. Material on any subject will be supplied by the Clipping Loan Collection Service, to aid you with your presentation before civic organizations, luncheon clubs, women's groups, parent-teacher associations, etc., etc.

* * *

The "Directory Number" of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY will carry only the names of members in good standing as of April 1, 1937. Your 1937 dues must be paid by that date in order for you to be in good standing. Please see your County Secretary and pay your dues as soon as possible so that your name will not be omitted.

* * *

Michigan physicians and engineers who were on duty in the flood district included: Dr. C. D. Barrett, Director, Bureau of Communicable Diseases, Michigan Department of Health; Dr. R. C. Farrier, Health Officer of Delta County; Dr. C. D. Hart, District Health Officer, Newberry; Dr. Max Igloe, District Health Officer, Big Rapids; Mr. Raymond Faust, Mr. John Miller, Mr. LaRue Miller, engineers from the Michigan Department of Health.

* * *

Forty County Secretaries came to Lansing on February 7 to attend the Annual Secretaries' Conference, which was a very successful meeting. (See the detailed write-up in the Society Activities column). Only six secretaries from the Lower Peninsula were absent. Among those present who came a great distance were Dr. A. T. Rehn of Newberry, secretary of the Luce County Medical Society, and Dr. George A. Conrad of Sault Ste. Marie, secretary of the Chippewa-Mackinac County Medical Society, both from the Upper Peninsula.

* * *

A few more of your friends who entered technical exhibits at the Detroit Convention of the State Society, held in September, 1936, included:

Philip Morris & Co., Ltd., Inc., New York, N. Y.
C. V. Mosby Company, St. Louis, Mo.
Parke, Davis & Company, Detroit, Mich.
The Pelton & Crane Company, Detroit, Mich.
Pet Milk Company, St. Louis, Mo.
Petrolagar Laboratories, Chicago, Ill.
Picker X-Ray Corporation, New York, N. Y.
Pocahontas Fuel Company, Inc., Detroit, Mich.
Randolph Surgical Supply Company, Detroit, Mich.
E. H. Rowley Company, Detroit, Mich.

* * *

The Upper Peninsula Medical Society will hold its annual meeting in Houghton, on August 19 and 20, 1937. An executive committee consisting of Dr. W. A. Manthei, General Chairman, Lake Linden; Dr. C. A. Cooper, Hancock; Dr. Alfred Labine, Houghton; Dr. L. S. Leo, Houghton, and Dr. Joseph R. W. Kirton, Calumet, was appointed. Subcommittees will be appointed by this group, and a plan of organization worked out to make this meeting one of the high spots of the year. Upper Peninsula physicians are asked to bear the date in mind when planning their summer activities.

MARCH, 1937

"Social Security and Health Insurance" was the title of a Medical Economics abstract which appeared in *The Journal of the American Medical Association* on January 30, 1937, as follows (page 40B):

"The visionary talk of health insurance should be replaced by a more practical and very necessary talk of job assurance is the opinion of H. E. Perry, M.D. Give every worker a job and enough wage to pay his bills and more. Then the problem of distribution of medical care will not exist. Government (of all types) should stay out of the practice of medicine for the good of the public and medical progress. Leave medical practice to medical doctors who are fitted for the job by training, experience and legal qualifications."

* * *

Crippled and Afflicted Child Commitments for January, 1937:

Crippled Child: Total of 157.

Of the total number 70 went to the University Hospital and 87 went to miscellaneous local hospitals.

From Wayne County (included in above totals): Total cases 41.

Of the 41 cases in Wayne County, 5 went to University Hospital and 36 to local hospitals.

Afflicted Child: Total of 1,016.

Of the total number 190 went to University Hospital and 826 went to miscellaneous hospitals.

From Wayne County (included in above totals): Total cases 275.

Of the 275 cases in Wayne County, 19 went to University Hospital and 256 went to miscellaneous hospitals.

* * *

Michigan physicians who have written papers which appeared in recent issues of *The Journal of the American Medical Association* are Drs. F. A. Collier and W. G. Maddock of Ann Arbor whose article was entitled "Water Balance in Surgery." "Encapsulated Brain Abscess" is the title of a paper by Dr. E. A. Kahn of Ann Arbor published in the January 9 issue. "The Physician and the Traffic Problem" by Dr. Lowell S. Selling of Detroit; and "Management of Facial Injuries Caused by Motor Accidents" by Dr. C. L. Straith of Detroit, also originated in Michigan, and appeared in the January 9 number.

"Cancer of Lip" by Drs. U. J. Wile and E. A. Hand of Ann Arbor, was published in the January 30 issue. Dr. Ferris Smith of Grand Rapids is the author of "Lipoma of the Tongue" appearing in *The Journal of the A. M. A.* of February 13.

* * *

Dr. J. D. Bruce of Ann Arbor, Vice President in charge of University relations, was appointed by the Board of Regents on January 22, 1937, as Chairman of a new division of the University called "A Division of Extra Bureau Purposes," which will act as an advisory body to directors of the following University divisions and activities: Postgraduate Activities; all sections and bureaus in the Extension Division; The Library Extension Service; The Bureau of Appointments and Occupational Information; The Bureau of Alumni Relationship; The Bureau of Cooperation with Educational Institutions; The Bureau of Student-Alumni Relationship; The In-service Training Department of the Bureau of Reference and Research in Government; The Industrial Teachers' Training of the Department of Vocational Education; and such other divisions and activities of the University that from time to time will be included.

Congratulations, Doctor Bruce!

"State Society Night" was marked by the Shiawassee County Medical Society, February 18, 1937. Sixty physicians representing the Michigan State Medical Society, and doctors from Shiawassee, Clinton and Genesee Counties attended a "State Society Night" held in the Owosso City Club under the sponsorship of the Shiawassee County Medical Society in collaboration with the Clinton County Medical Society.

The banquet meeting was preceded in the afternoon by sessions of the Executive Committee of The Council of the State Society and the Legislative Committee.

In an effort to acquaint members with work of the State Society, the following officers spoke following the dinner:

Dr. Henry E. Perry of Newberry, president, spoke on "What Organized Medicine Means to the General Practitioner;" Dr. Paul R. Urmston, Bay City, chairman of The Council, on "What Your Officers Do;" Dr. L. Fernald Foster, Bay City, secretary, on "Committee Work of the State Society;" Dr. Frank E. Reeder, Flint, speaker of the House of Delegates, on "Work of the House of Delegates;" Dr. L. G. Christian, Lansing, chairman of the Legislative Committee, on "Legislative Problems;" Dr. Henry Cook, Flint, president-elect, on "The Future of Organized Medicine," and Dr. Henry R. Carstens, Detroit, chairman of the Finance Committee of The Council, on "Financial Set-up of the State Society."

Wm. J. Burns, executive secretary, discussed organization problems. Remarks were also made by councilors of the State Society—Dr. Fred Baker of Pontiac, Dr. A. S. Brunk of Detroit, and Dr. F. T. Andrews of Kalamazoo.

Among other prominent physicians present were: Dr. James H. Dempster of Detroit, editor of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY; Dr. Howard H. Cummings of Ann Arbor, member of The Council; Drs. Wm. E. E. Tyson and J. W. Hawkins of Detroit, members of the Legislative Committee. There was a delegation of fifteen physicians from Flint in attendance at the meeting.

Dr. Herbert Randall of Flint and Dr. A. M. Hume of Owosso, past presidents of the Michigan State Medical Society, were present.

* * *

Midwest Conference on Occupational Diseases

Dr. Henry Cook, president-elect of the Michigan State Medical Society, has accepted the co-chairmanship of the general committee arranging for the Midwest Conference on Occupational Diseases in Detroit, May 3 to 7. In accepting this appointment, Dr. Cook writes: "The problems of occupational diseases and industrial hygiene are of greater significance to the physicians of Michigan and other midwestern states at this time than at any previous period. The Midwest Conference should go far in familiarizing large numbers of physicians and others with these particular types of diseases, their diagnoses, and management. Personally, I am much interested in the work that is being planned and look forward to stimulating sessions and a large attendance."

Other chairmen working with Dr. Cook are: Dr. C. C. Slemons, Health Commissioner of the state; Dr. Henry F. Vaughan, Health Commissioner of the city of Detroit; Dr. Gordon Harrold, representing the Engineering Societies of the state; Dr. Carey P. McCord, who has long worked as a consultant on occupational diseases.

The Detroit Dermatological Society will furnish one complete half day's program during the Midwest Conference devoted to industrial skin diseases. The chief speaker will be Dr. Marion Sulzburger

of New York, who will discuss the ways and means for precisely tracing skin diseases to causative agents in industry. Dr. Loren Shaffer of Detroit and Dr. R. C. Jamison of Detroit will likewise participate in this dermatological program.

The completed program will be published in the April issue of the JOURNAL. Among other speakers addressing those in attendance will be Dr. William D. MacNally of Chicago, Dr. Emery Hayhurst of Columbus, Dr. C. O. Sappington of Chicago, Mr. J. M. Dallavalle of Washington, D. C., and Dr. John G. Cunningham of Toronto.

The Midwest Conference after three days of programs will merge with the American Association of Industrial Physicians and Surgeons and the Michigan State Association of Industrial Physicians and Surgeons for the programs of Thursday and Friday of the conference week.

One entire day will be featured by laboratory demonstrations—laboratory apparatus and procedure connected with industrial hygiene and occupational diseases. These demonstrations will include dust counting, carbon monoxide measurement, patch testing for skin diseases, blood work in lead poisoning, the use of animals in appraising dust hazard, noise measurement, gas analyses, et cetera.

COUNTY AUXILIARIES

(Continued from page 201)

Saginaw County

The February meeting of the Saginaw County Auxiliary was held at the home of the president, Mrs. A. E. Leitch, Saginaw, Tuesday evening, February 16.

Plans were completed for the annual "Bring-Your-Husband Dinner-Dance" held Thursday, February 18, in the Crystal Ball Room of the Bancroft Hotel.

Mrs. Claire L. Straith, of Detroit, vice president of the State Auxiliary, was present and spoke briefly on organization work in the state.

Honors at games went to Mrs. Straith, Mrs. F. E. Luger and Mrs. Robert Jaenichen. Refreshments were served late in the evening.

Members of the Saginaw County Medical Auxiliary added another success to their list of delightful entertainments, Thursday evening, February 18, when they gave their annual "Bring-Your-Husband Dinner Dance" in the Crystal Ball Room of the Bancroft Hotel.

The floor show, given under Miss Maybelle Lawford's supervision, was greeted with much applause. It included waltz clogs, comedy routine, tap dancing and jazz toe dancing. Several special numbers were given by a clever young saxophonist.

Coffman's orchestra played for dancing until midnight.

The committee assisting the president, Mrs. A. E. Leitch, included Mrs. Milton C. Butler, Mrs. Arthur Grigg, Mrs. G. E. Tiedke, Mrs. R. S. Jiroch, Mrs. G. R. Murray, Mrs. Stuart Yntema and Mrs. C. E. Tochach.

Preceding the party several delightful hors d'oeuvres parties were given in various homes.

MRS. LLOYD C. HARVIE,
Press Chairman.

* * *

Wayne County

Dr. Harold Mack was the guest speaker of the Wayne County Auxiliary, Friday, February 12, at the Medical Club Rooms. Doctor Mack's subject was "Oliver Wendell Holmes." At the conclusion of the talk, tea was served to approximately seventy-five members and guests.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

A HAND-BOOK OF OCULAR THERAPEUTICS. By Sanford R. Gifford, M.A., M.D., F.A.C.S. Professor of Ophthalmology, Northwestern University Medical School, Chicago, Illinois; Attending Ophthalmologist, Passavant Hospital, Wesley Memorial Hospital, Evanston Hospital and Cook County Hospital, Chicago, Illinois. Second edition, enlarged and thoroughly revised, published in 1937. 12 mo, 341 pages, illustrated with 60 engravings. Cloth, \$3.75, net. Philadelphia: Lea & Febiger.

Among the subjects discussed in the second edition of this work are anesthetics, narcotics and hypnotics, drugs and organ extracts used in ophthalmology, specific and non-specific protein therapy and physical therapy. The book is divided into chapters on diseases of the lids, conjunctiva, cornea, uveal tract, crystalline lense, retina, optic nerves and central visual pathways, lacrimal apparatus, disorders of the muscular apparatus and diseases of the orbit and injuries to the eye. A chapter is devoted to glaucoma. The subject of diagnosis is discussed only so far as as it is necessary to intelligent treatment. The book will be found of great value, not only to specialists, but also to the general practitioner. The latter, however, should approach the subject with a great deal of caution and with a full knowledge of his limitations. There are locations, however, where an ophthalmologist is not easily accessible.

SKIN DISEASES IN CHILDREN. By George M. MacKee, M.D., Professor of Clinical Dermatology and Syphilology, New York Postgraduate Medical School, Columbia University, New York; and Anthony C. Cipollaro, M.D., Associate in Dermatology and Syphilology, New York Postgraduate Medical School, Columbia University, New York, with 153 illustrations. New York and London: Paul B. Hoeber, Inc., Medical Book Department of Harper and Brothers, 1936.

The author recognizes the inefficacy of any attempt to classify scientifically dermatologic diseases and has wisely omitted any such attempt. Rather has he grouped skin affections, for this discussion, in some cases, according to their etiology and, in other cases, according to the pathology found, although long pathologic descriptions are not included here. In other cases, the conditions are grouped according to the part of the body affected; others we find grouped because of similarity of symptoms. This arrangement has been fortunate since it makes for simplicity and easy comprehension, especially for the pediatrician. In each case, enough of symptoms is given to make differential diagnosis possible. The chapter on the eczematous diseases, which seems, in most books, to be much involved in lengthy discussions, is here simplified so that one can not help but have a clearer understanding of this group of diseases.

Throughout the book treatment is stressed. While one is expected to learn some few prescriptions, as in most books on this subject, here more attention is given to the rationale of the use of drugs in their varying strengths as they are applied to the skin.

In the chapter on syphilis, the author gives considerable space to a description of the morphology of the lesions of the disease as they appear in the skin, especially with reference to their distribution and the stage of the disease in which they appear. The illustrations are clear and add much to the value of the book.

MARCH, 1937

DIETETICS FOR THE CLINICIAN. By Milton Arlanden Bridges, B.S., M.D., F.A.C.P., Director of Medicine, Detention, Rikers Island and West Side Hospitals, New York; Consulting Physician, Seaview Hospital, Staten Island, New York, and Department of Education, New York University, New York; Assistant Professor of Clinical Medicine and Lecturer in Therapeutics and Nutrition, New York Postgraduate Medical School of Columbia University; Associate Attending Physician and Chief of Diagnostic Clinic, Postgraduate Hospital, New York; Fellow of the New York Academy of Medicine. Third edition, enlarged and thoroughly revised, published 1937. Octavo, 1055 pages. Cloth, \$10.00, net. Philadelphia: Lea & Febiger.

This is a thoroughly practical book, not only for the clinician, but for the dietitian and even the layman who is sufficiently trained to read it intelligently. It contains a vast amount of data on the subject of foods and beverages. Among the subjects discussed are the vitamin factors in diet, the physiology and chemistry of digestion, the mechanics of digestion, classification and structure of foods. Besides this, two sections are devoted to pediatrics, one on infant feeding and the other on the dietetic management of diseases of children. Four hundred and seventy-six pages are devoted to the management of diseases of adults where diet fills an important rôle. The appendix of the book includes over two hundred pages of tables, summarizing the analysis of common foods, including nationally recognized commercial products. The work offers a complete summary of the field of dietetics with an extensive review of its current literature. The chief objective of this work, as mentioned, has been to supply a worthwhile addition to the armamentarium of the nutritional expert, the home economist, the general practitioner and the hospital interne. The book is strongly recommended.

Cook County Graduate School of Medicine

(In affiliation with COOK COUNTY HOSPITAL)

ANNOUNCES CONTINUOUS COURSES

MEDICINE—Informal Course first of every week; Intensive Personal Courses.

SURGERY—General Course One, Two, Three and Six Months; Two Weeks Intensive Course Surgical Technique (Operative Surgery with Practice); Clinical Courses.

GYNECOLOGY AND OBSTETRICS—Four Weeks Intensive Course, starting May 3, 1937.

FRACTURES AND TRAUMATIC SURGERY—Informal Practical Course; Intensive Ten-Day Course starting April 12, 1937.

EAR, NOSE AND THROAT—Informal Course; Personal Courses; Intensive Two Weeks Course starting April 5, 1937.

OPHTHALMOLOGY—Intensive Two Weeks Course starting April 19, 1937.

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RECENT ADVANCES IN NUTRITIONAL RESEARCH

Beaumont Foundation Lectures before the
Wayne County Medical Society, Detroit

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BALTIMORE, MARYLAND

I. The Vitamins

The biochemists have busied themselves with studies of the chemical composition of animal and plant substances, and the transformation of specific substances in the body. One of the most important and attractive fields of inquiry since 1881 has been that relating to the chemical complexes which are indispensable in the diet. In that year Lunin¹⁶ first attempted to nourish young animals on a diet composed of purified protein, carbohydrate, fats and a salt mixture, and observed that they immediately began to fail nutritionally. He drew the conclusion that there exist certain unidentified nutrients. Later attempts to discover the nature and number of these unidentified nutrients have revealed the existence of a number of substances, indispensable for normal nutrition, which have been collectively called vitamins. The extraordinary fact common to all of them is the exceedingly small quantities in which they are required.

The method of study of these substances is based upon simplification of the diet as far as possible by employing a mixture of adequate proteins, carbohydrates and fats, together with an adequate salt mixture, and supplementing this inadequate mixture with small amounts of individual natural foods, or extracts of these, and observing the behavior of experimental animals as respects

growth, fertility and longevity, and when failure of nutrition supervenes, the symptoms which they exhibit. In this way each of the deficiency syndromes has been discovered. Further efforts are then made to concentrate or separate in pure form the nutrient principle which was lacking in the diet. In several cases it has been possible to isolate the vitamin, a deficiency of which caused the symptoms.

A deficiency disease, of whatever nature, causes distinctive functional disturbances, which have their origin in morphologic changes in certain tissues which are regarded as primary effects. Various non-specific and secondary effects necessarily follow. The biochemist discovers the existence and the chemical nature of the vitamin and describes its effects on the animal. The pathologist then makes his contribution in describing the morphologic changes in the tissues. The clinician is then in a position to interpret provisionally the etiology of the deficiency disease in the human patient, and

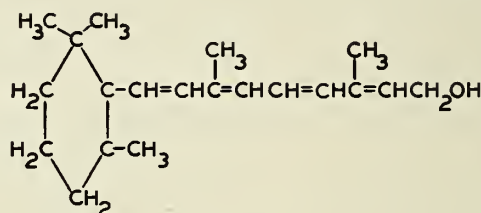
†Professor E. V. McCollum was graduated from the University of Kansas, A.B., 1903, A.M., 1904, Yale University, Ph.D., 1906. He received the honorary degree Sc.D. from the University of Cincinnati, 1921. He was instructor, assistant professor and professor, University of Wisconsin, 1907-1917. He has been professor of biochemistry at the School of Hygiene and Public Health of the Johns Hopkins University from 1917 to the present time. He discovered vitamin A, 1913; vitamin D, 1922. He was the first to formulate an adequate working hypothesis as to what constitutes an adequate diet, 1915. Dr. McCollum produced experimental rickets with explanation of the cause, 1920, and described the "line test" for assay of foodstuffs for vitamin D.

to confirm his diagnosis by therapeutic trials of products shown by the experimenter to cause remission of the disease in his animals.

Vitamins A, D and E are soluble in fats and are associated with lipid extracts of natural products. Vitamins B-1, C (ascorbic acid), riboflavin and the antipellagra factor or factors, and certain others which I shall discuss, are soluble in water. There is at least one fat-soluble factor not listed above, and several water-soluble factors, known to be indispensable for the rat or the chick, which are not, apparently, essential for man.

Vitamin A.—Vitamin A does not occur in the plant world, but its precursor, carotene, is widely distributed. It has been obtained from fish liver oils by distillation of a concentrate in high vacuum. It is a slightly yellow viscuous oil. Its chemical nature was discovered through a knowledge of the molecular structure of carotene. Carotene is one of the yellow pigments found in yellow and green plants, and was so named because it was first isolated from carrots. It occurs in three forms, α -, β -, and γ -carotene. β -carotene has double the vitamin value of the other forms. Half a century of study by organic chemists of the degradation products, chemical reactions with specific reagents, and synthesis, of the class of compounds known as terpenes, of which turpentine and camphor are examples, prepared them for the immediate solution of the molecular architecture of carotene as soon as the biochemists had shown its importance as a precursor of vitamin A. Carotene has the following structure:

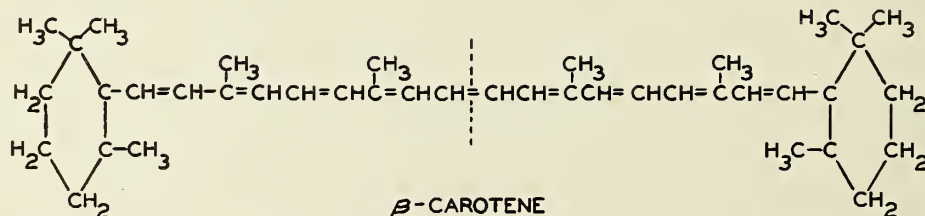
bach³¹ has discussed the subject in detail. In the lungs cyst formation and bronchial occlusion, with consequent bronchiectasis and atelectasis, have been observed in man and animals. In organs cysts are formed which are filled with a yellow cheesy mass of desquamated keratinized cells. In ducts, bronchi and trachea these masses afford a cultural medium for bacterial growth, but Wolbach states that he has rarely observed invasion of the tissues, which would seem



VITAMIN A

The structure of carotene was determined by a study of its unsaturation and its oxidation products with several oxidizing agents, which yield somewhat different simple fragments of the molecule. Carotene has been shown by feeding experiments and by injection, to serve as a source of vitamin A. Vitamin A has been obtained by Holmes and Corbet⁴⁰ by distillation of a concentrate of fish liver oil, and freezing it in solution. They obtained crystals which melt at 5.5-6 C. to a yellow viscuous oil. Its chemical properties and molecular weight agree with the vitamin formula given above. Fuson and Christ⁷ report the synthesis of a substance having the structure of the vitamin but no biological tests have been reported. The pure vitamin, according to Holmes and Corbet, has a potency of 100,000 International Units per cubic centimeter.

Pathologists are agreed that the primary effect of vitamin A deficiency is on epithelial cells. The cells atrophy and become stratified, keratinized epithelium, identical irrespective of their source, and are continually produced from proliferation of basal cells. Similar observations have been made on several species of mammals and on birds.



β -carotene is cleaved in the liver as indicated by the dotted line, and, by the addition of two molecules of water, is converted into two molecules of vitamin A.

The striking pathologic condition of vitamin A deficiency is the result of accumulation of keratinized epithelial cells in glands and their ducts, and in many organs. Wol-

bach to indicate that the keratinized layer of epithelium constitutes an effective barrier. However, Higgins,⁹ who has extended our knowledge of the production and solution

of urinary calculi, which occur in at least fifty per cent of experimental animals deficient in vitamin A, points out that the sequence of events is keratinization of the epithelium of the genito-urinary tract, urinary infection, and alkalinuria due to ammonia formation. In experimental A-deficient rats he found in 42 per cent coexistent renal infection. The calculi form through precipitation of calcium phosphate from alkaline urine, probably facilitated by the presence of desquamated cells. On administration of vitamin A, the epithelial cells return to their normal form and function, the infection clears up, and the urine becomes acid. The maintenance of an acid urine causes gradual solution of the phosphatic calculi. O'Conner²¹ has pointed out the frequent occurrence of calcium carbonate calculi in patients maintained on an alkaline diet in the treatment of ulcer, and states that the provision of abundant vitamin A is generally effective in preventing recurrence of these stones.

During the last few years several clinical investigations have been published on the skin lesions which, according to some observers, are the earliest evidence of vitamin A deficiency. Frazier and Hu⁵ first pointed out that in this deficiency keratotic papules of varying size appear, distributed especially over the thighs, arms and shoulders, which arise from the pilosebaceous follicles. Microscopically, the ducts are distended, and the openings are plugged with desquamated cornified epithelium. Hyperplasia of the epidermis and atrophy of the glands characterize the skin. The eruption is said to be rare in children, but rather common in adults, and when fully developed probably represents late or severe deficiency. Youmans⁵³ has recently discussed the clinical aspects of this syndrome.

Particular interest now centers upon the effect of vitamin A deficiency in its relation to impairment of vision. Fridericia⁶ first noted that in vitamin A deficiency, the visual purple of the retina is not regenerated after it has been bleached by light. Wald²⁸ has shown that light adapted retinas contain 0.2 to 0.3 gamma of vitamin A, while dark adapted ones yield only a trace. Visual purple in dark adapted retinas is destroyed by light with the production of an undescribed carotenoid pigment which

he calls retinene, which is identical with visual yellow, and with a quantitative production of vitamin A. He believes that the visual purple system is a cycle, vitamin A combining with some substance, probably protein, to form visual purple, which is then broken down by light to the carotenoid retinene. This pigment may be reformed into visual purple, or further transformed to vitamin A, which may then recombine with protein to regenerate visual purple. Some of the vitamin A must be lost, since the formation of visual purple is dependent upon the presence of the vitamin in the diet.

Xerophthalmia and night-blindness are believed not to measure the incidence of milder grades of vitamin A deficiency. Jeans and Zentmire¹² have reported a series of forty-five cases of mild hemeralopia in 213 children, and in later studies they found 26 to 75 per cent of children in different social groups with evidence of vitamin A deficiency. In general, their patients responded well to the administration of vitamin A. There is still some controversy concerning the adequacy of their technic for measuring dark adaptation of the eyes, and further studies will be awaited with interest. Blackfan¹ states that the examination of a smear made from light scrapings from the bulbar conjunctiva, after staining, with observation of cornified cells, constitutes a simple test for early deficiency of the vitamin. Sweet and K'ang²⁵ assert that this, or examination of nasal scrapings, is the most reliable test for early deficiency of vitamin A. Asthenopia, poor vision, photophobia, Bitot's spots, and dryness and granular appearance of the bulbar conjunctivæ when the lids are held open for a few minutes, are early manifestations of this deficiency, and should cause the physician to make further inquiry.

Vitamin B-1.—It is well known that severe deprivation of this vitamin causes beri-beri, which constitutes one of the major health problems among rice eating peoples. At present there is no way to discover the extent to which sub-clinical deficiency, or clinical manifestations of deficiency more mild than are essential to cause beri-beri, occur. Anorexia, weakness, vague pains, indigestion and hypotonicity of the bowel have been suggested as manifestation of

deficiency of B-1, but the only criterion for this view is the favorable reaction of patients to yeast, or vitamin concentrate therapy. The complexity of the water-soluble vitamin group makes it impossible to decide whether B-1 or a multiple deficiency may be involved in these cases, although the presumption is strong that this is the specific factor involved.

Strauss²⁴ has recently reported studies which show that dietary deficiency diseases, particularly pernicious anemia, and related macrocytic and idiopathic hypochromic anemias, pellagra and "alcoholic" pregnancy, and other forms of polyneuritis in the temperate regions, are more frequently caused by conditioning gastro-intestinal disturbances which interfere with the digestion and absorption of nutrients than by inadequate composition of the diet. Persistent vomiting, diarrhea or dysentery, may result in profound malnutrition, which responds to dietotherapy.

The difficulty in determining the existence of moderate grades of B-1 deficiency lies in the lack of a specific and delicate method of determining this vitamin. Prebluda and McCollum²² have recently announced the discovery of a test of great delicacy which, it is hoped, may make possible studies of the content of vitamin B-1 in biologic products comparable with those recently made on ascorbic acid.

Pending the development of a method of precision for estimating very small amounts of vitamin B-1 in biologic products, we can only surmise in what clinical conditions a deficiency of this substance plays a rôle where symptoms other than polyneuritis are observed. There is abundant evidence that in B-1 deficiency the most conspicuous lesion is degeneration of the myelin sheaths of the peripheral nerves. Wolbach believes that it is less certain that degenerative changes occur in the ganglion cells of the brain, cerebellum, spinal cord and dorsal root ganglions. It seems to be fully established, however, that in this deficiency there is an accumulation of lactic acid in the brain of the pigeon. O'Brien and Peters²⁰ found that respiration *in vitro* of brain tissues of rats deprived of B-1 was increased by addition of the vitamin, whereas such addition to the brain of normal animals caused only negligible effects. Addition of the vitamin in these experiments reduced the formation

of abnormal amounts of pyruvic acid in the brain tissue of deprived rats. Thompson and Johnson²⁶ have confirmed these results.

The so-called B-complex, in so far as human nutrition is concerned, consists of vitamin B-1, riboflavin, and one or more factors concerned in the etiology of pellagra. In most of the clinical observations where B-1 deficiency was suspected and dietotherapy was instituted, yeast or a yeast concentrate was administered, so that all "B-factors" were given. Among the more interesting reports of response to B-complex therapy are the following:

Widenbauer²⁹ suspected B-1 deficiency in chorea mollis, and found yeast therapy effective after other measures had failed. He cites evidence that suggests relations between chorea minor, spasmophilia, funicular myelitis, and B-avitaminosis. Minot¹⁹ has reported cases of diabetes associated with peripheral neuritis and achylia gastrica, which responded to yeast therapy, and raised the question whether achylia gastrica may not interfere with the utilization of both the anti-beri-beri and anti-pellagra vitamins. Many cases are recorded of the appearance of avitaminosis B associated with voluntary restriction of the diet as a result of digestive disturbances, or restriction for therapeutic measures, as in diabetes, et cetera. Cowgill and Gilman³ observed depression of acid secretion by the stomach in animals restricted to deficient diets. Cowgill was the first to report that in animals anorexia is the first symptom of vitamin B deficiency.

Elsom⁴ studied a patient who voluntarily restricted the diet, whose symptoms resembled those of pernicious anemia. There was marked pallor, glossitis, and signs of posterolateral sclerosis. The typical signs of pernicious anemia, achlorhydria and anemia, were lacking. There was edema and low blood proteins. Administration of a liver preparation adequate to produce remission of pernicious anemia caused only slight improvement of the glossitis. On administration of a concentrate of "B-complex" there was rapid improvement in respect to fatigue, anorexia, dyspepsia, paresthesia, edema, glossitis, scaling of the forearms and brittleness of the nails. Improvement began in two weeks, and was complete in six. The pitting edema disappeared with simultaneous rise in blood protein, although

there was no increase in the protein content of the diet. Elsom's case is interesting as a confirmation of the work of Strauss, and because it suggests a cause for edema not found in the usual etiologies of cardiac and renal disease. In this case doubtless multiple deficiency existed, but there is reason to believe that the anorexia, dyspepsia, posteriolateral sclerosis and glossitis were caused by B-1 deficiency, the remaining symptoms probably arising from inadequate food intake and specific starvation for other water-soluble vitamins.

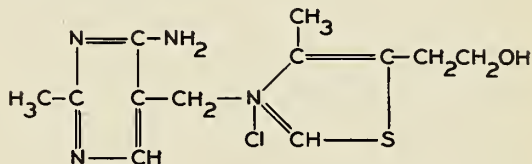
Middleton¹⁸ has reviewed the literature relating to clinical studies of the atrophic tongue, which is seen in pernicious anemia, achlorhydric anemia, anemia of pregnancy, pellagra, sprue, Plummer-Vinson syndrome, malnutrition attended by dysentery and anemia, intestinal stricture, pyloroplasty complicated by peritonitis, Dibothriocephalus latens, and achlorhydria. Hutter, Middleton and Steenbock¹¹ observed smooth, bald tongues in rats restricted to a diet deficient in the B-complex.

Cowgill² formulated a method for appraising the vitamin B requirement of the dog, rat, pigeon and man, which is based upon body weight, total metabolism (calories), and maximum normal weight for the species. He estimated the vitamin B content (the present B-1) of many human dietaries, and correlated the results with health conditions and clinical observations, and concluded that vitamin B deficiency is widespread in regions where beri-beri is rare, and to an extent which might be expected to impair health. One may reasonably suspect that certain gastro-intestinal disorders, heart disorders, neurological conditions, marasmus, anemias, and perhaps hyperthyroidism, may be caused by deficiency of one or more of the vitamins of the B-complex, or secondary manifestations of restricted intake or utilization of nutrients, secondary to such deficiency.

I have included these references to the clinical literature relating to so-called B-deficiency, because they suggest the importance of further inquiry by clinicians of the etiology of several disorders which has been obscure. The response to yeast administration or to concentrates which supply the same vitamins as does yeast, suggests the study of these conditions by the provision of crystalline B-1, which is now

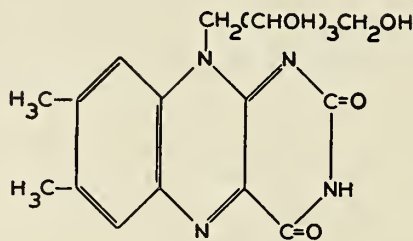
available in abundance and at low cost. There seems to be convincing evidence that B-1 deficiency is sufficiently common to be very important to the physician. By testing the value of the synthetic vitamin in several conditions in comparison with yeast, he can determine the significance of B-1 and of the remaining water-soluble vitamins as a health problem.

Vitamin B-1 is now synthesized in large quantities. Its structural formula is shown by the following:



VITAMIN B-1

Riboflavin.—Kuhn¹⁵ discovered that the greenish yellow pigment of whey (lactoflavin) is an indispensable nutrient for the rat. Believing that he had isolated the anti-pellagra vitamin he called it B₂, in accordance with the British nomenclature. Further study made it clear that this flavin does not prevent or cure the so-called rat pellagra, and that the substance had been misnamed. Lactoflavin has been synthesized, and its molecular configuration is shown by the following formula:



RIBOFLAVIN

Flavins have been synthesized which have, respectively, each of several sugar groups replacing the d-ribose, but it is clear that the ribityl derivative is the one of biologic importance.¹³ Flavins closely resembling, if not identical with lactoflavin, have been isolated from liver, kidney, and egg white, and have been called respectively hepato-flavin, renaflavin and ovoflavin. From numerous nutrition studies with natural foods as the sole source of water-soluble

vitamins, it seems evident that riboflavin is widely distributed in animal and plant products. We know nothing about the pathology of riboflavin deficiency, other than that rats cannot survive and grow without it. It has been shown not to benefit pellagrins.

Vitamin C.—This substance is now generally called ascorbic acid, but in the pharmaceutical trade cevitic acid. It has been synthesized by several procedures, and is available in abundance at moderate cost.

The relation of ascorbic acid deficiency to scurvy is too well known to require discussion. Of greater interest to the clinician is the problem of subclinical scurvy with all its implications as a public health problem. Search for methods which will detect the earliest manifestations of ascorbic acid deficiency before clinical signs become evident have revealed that blood and urine analysis by chemical methods, and the determination of the resistance of the capillaries to pressure, may yield valuable criteria. Ascorbic acid may be determined by a titration method with very great precision. Adults, taking fairly satisfactory diets, carry 1,000 to 2,300 mg. per 100 cubic centimeters of blood. Children subsisting on poor diets have shown values ranging from 0.687 to 0.917 mg. Patients showing symptoms compatible with mild ascorbic acid deficiency had 0.254 to 1.09 mg. of ascorbic acid per 100 cm. of blood. Provision of a diet rich in the vitamin has raised the content in the blood to 4.31 mg. The response of the blood content of ascorbic acid to administration is rapid, but falls off, with depletion of the body's reserves, within a few days when it is not provided by the diet. The minimum content of the vitamin in the blood compatible with health has not been finally established.

Yavorsky and King³² found the tissues of human subjects to vary from over three times the "average" value to less than one-tenth of it. They estimate that 20 per cent of subjects examined *post mortem* (in America) were in a state of latent scurvy. The minimum daily amount of ascorbic acid intake which is required to prevent the slightest objectively ascertainable prescurvitic alterations has been estimated to be about 27-30 mg. per day for the normal adult. Göthlin⁸ believes, on the basis of studies on the capillary strength in children,

that the child requires twice as much as the adult.

The test of capillary resistance is made by constricting the arm above the elbow, and counting the number of petechial points in one square inch of skin on the inner surface of the upper fore-arm. The results of different investigators on groups of children have shown considerable variation in individuals, and with the seasons. It seems certain that, notwithstanding marked individual differences in capillary strength due to causes other than the state of nutrition, there is a marked tendency to seasonal variation, the capillaries showing greatest strength during the season when fresh fruits and vegetables are available, and lowest strength in late winter and spring.

Studies on urinary excretion of ascorbic acid show that very little is excreted by the adult until the intake exceeds about forty milligrams per day. The excess over this amount is excreted by the kidneys. An interesting observation shows that active cases of tuberculosis require an intake of ascorbic acid much higher than do arrested cases to induce excretion of the vitamin. The arrested case behaves like the normal individual, whereas fifty to eighty, or even two hundred, milligrams intake is necessary in different individuals with active tuberculosis before an appreciable output in the urine is observed. There appear to be no data for fever patients other than those with active tuberculosis. It appears that in this disease, and perhaps in all fever patients, the requirements for ascorbic acid are very high.

King and Menten¹⁴ have shown that guinea-pigs maintained on diets deficient in ascorbic acid, and injected with sublethal amounts of diphtheria toxin, showed diffuse hyperplastic arteriosclerosis in the lungs, liver, spleen and kidneys. No vascular thickening was observed in the heart. Their animals developed hydrophic degeneration of the islets of Langerhans, and an associated hyperglycemia and lowered glucose tolerance. With recovery of the animal the pancreatic lesions disappeared. Doses of several bacterial poisons in sublethal amounts (0.1, 0.3, 0.5 and 1.0 M.L.D.) were given to animals under controlled conditions and receiving ascorbic acid at abundant, protective and sub-protective levels. When the guinea-pigs were partially depleted, of their ascorbic acid reserves

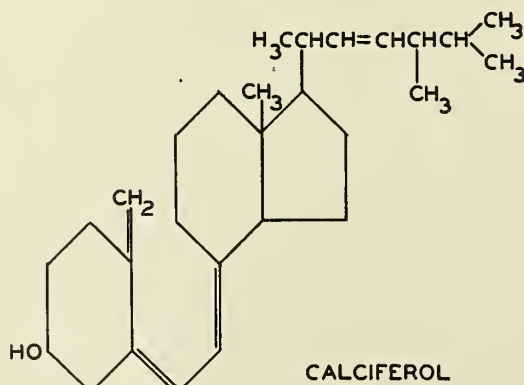
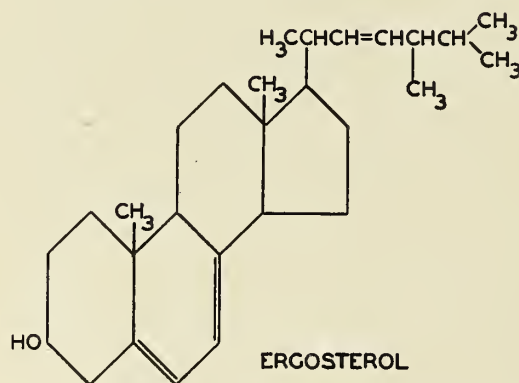
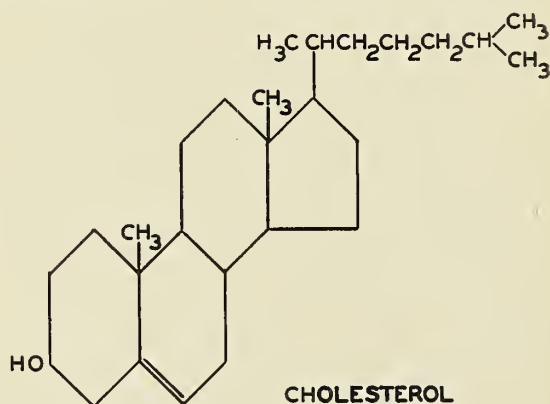
without showing any external signs of scurvy, the survival time was shortened about 50 per cent and the loss of weight was more severe. Hemorrhage and necrosis at the site of toxin injections were more marked in the latent scurvy condition. There was a decrease in oxygen consumption capacity of liver and kidney tissue of 5 to 15 per cent after toxin injection. They conclude that there is a wide zone of ascorbic acid deficiency, without the appearance of scurvy, where physiological processes are subnormal and the animal is more sensitive to injury from bacterial toxins.

McConkey and Smith¹⁷ fed tuberculous sputum to animals suffering from ascorbic acid deficiency and to animals on a normal diet. Ulcerative intestinal lesions of tuberculosis developed in the deficient animals but not in the controls. Reinhart, by combining chronic scurvy with super-imposed infection, produced a picture which had striking similarities to rheumatic fever and rheumatoid arthritis, and suggested that the sub-clinical state may constitute the "rheumatic tendency." The fact that administration of ascorbic acid to patients suffering from rheumatic fever has not proven effective as a therapeutic measure, in no way speaks against the view of Reinhart.

There seems to be very convincing evidence, therefore, that the maintenance of a high ascorbic acid reserve in the tissues affords not only a condition best suited for the maintenance of normal physiological processes, but likewise affords protection against pathological processes in certain tissues, occurring independently of disease-producing agencies, and also affords protection against tissue injury by bacterial poisons. These facts, together with the sensitivity of the odontoblastic membrane to deficiency of ascorbic acid, which influence adversely the structure of the developing tooth, and in the mature tooth its nutrition, place nutrition, in relation to the prescurbutic condition, clearly among the more important aspects of preventive medicine.

Vitamin D.—Vitamin D was discovered in its rôle as an antirachitic agent. The most striking effect of a deficiency of this nutrient is a fall in the content of inorganic phosphate ions in the blood. Such deficiency also exerts an extraordinary influence upon the behavior of the cartilage cells in the region of growth in the developing bone.

Normally, there is continuous transformation of resting cartilage into the vesicular form on the diaphysial side of the disc, and, after the formation of columns of cells of (in the rat) four to six units, a degeneration of these cells nearest the diaphysis, which keeps pace with proliferation. In vitamin D deficiency the degeneration of cells does not occur at the normal rate, and there is an accumulation of an abnormally large volume of vesicular cartilage together with excessive amounts of osteoid tissue. The severity of rickets may be gaged by these criteria.



Molecular configuration of cholesterol.

Vitamin D occurs abundantly in certain fish liver oils. Cod liver oil of U.S.P. grade contains 85 International Units of vitamin D and 600 units of vitamin A per gram. The International Unit of vitamin D is an arbitrary one. Halibut liver oil contains 75 to 125 times as much D as cod liver oil, bluefin tuna liver oil contains 40,000 I.U. per gram, and percomorph liver oils greatly exceed this value. The chemical nature of vitamin D in fish liver oils has not been determined, but they are closely similar to calciferol, which is crystalline vitamin D prepared from ergosterol by irradiation. Ergosterol is a sterol which occurs in relative abundance in fungi such as ergot and yeast. It is easily extractable by certain fat solvents, and is obtained in crystalline form. When irradiated with ultraviolet light it passes through a series of transformations, the most important of which is the product calciferol, likewise crystalline. Cholesterol, the principal sterol found in the animal body, has the molecular configuration shown on the preceding page.

The only method available for determining the vitamin D content of an oil is based upon observing the size of the dose necessary for the deposition of calcium salts in the region of growth in the bones of growing animals in the rachitic state. It has been found that if a sample of cod liver oil and one of calciferol are assayed with young rats and then with rachitic chicks, about 100 times as many rat units of calciferol as compared with rat units of the vitamin of cod liver oil are necessary to produce comparable calcification in the chick. This remarkable difference in the reaction of the rat and the bird affords a means of differentiating certain of the different forms of vitamin D. Rat unit for rat unit, the vitamin of bluefin tuna liver oil is only about one-seventh as potent for the chick as for the rat. Several careful investigations with human infants have demonstrated that the latter reacts almost equally well to the vitamin of cod liver oil and to calciferol. Calciferol dissolved in some vegetable oil is known in the pharmaceutical trade as viosterol. The therapeutic dose of either of these forms of the vitamin is 1000-1500 I.U. per day. The usual prophylactic dose recommended is about 400 units.

Studies of different derivatives of chole-

sterol and calciferol have shown the existence of at least six forms of vitamin D other than the two forms known to occur in nature in fish liver oils (*e.g.*, cod liver and bluefin tuna liver oils). The potency of these different forms differs greatly. The two most important forms are the one in cod liver, halibut liver, percomorph liver oils, et cetera, and calciferol.

Calciferol may be prepared from ergosterol by irradiation with ultraviolet light and also by subjecting the molecules of ergosterol to impingement by a stream of low velocity electrons. Both processes are protected by patent. The final product is believed to be identical in these two methods of preparation.

There is present in the skin a sterol of undetermined nature which, when acted upon by ultraviolet rays, either from sunlight or artificial sources, is converted into a form having antirachitic properties, hence sunlight containing such rays can prevent or cure rickets. In temperate regions, especially in cities where smoke screens cut the active rays of light, and where infants and children wear heavy clothing and remain indoors most of the time during the colder months, sunlight is not effective, and vitamin D should be provided during the winter months. Any of the fish liver oils sold for this purpose are satisfactory. A number of irradiated foods have been offered to the public as sources of the vitamin. Medical opinion now favors vitaminization of milk either by irradiation, which can result in a product containing not more than 135 I.U. per quart, or by the fortification of milk with a fish liver oil concentrate. Calciferol appears not to have been used to vitaminize milk up to the present time, although it would be satisfactory for this purpose. Liver oil concentrates are usually added to give the milk the potency of 300-400 units per quart. A third method of vitaminizing milk is to feed irradiated yeast to the cow. Vitamin D is absorbed and secreted in the milk. This method has been confined almost exclusively to certified milk production.

May Mellanby first demonstrated the importance of an adequate supply of vitamin D for the development of teeth with normal structure of enamel and dentine. She also showed by extensive studies on institutional children that the regular provision of vitamin D reduces the susceptibility of the

teeth to decay. Several investigators have confirmed her findings. Since the normal behavior of cartilage and a normal content of phosphate in the body fluids are essential for the calcification of enamel and dentine, and both depend upon an adequate supply of vitamin D, the soundness of this view is apparent. The presence of pits and fissures in teeth, forming potential food traps, predisposes the teeth to caries. Since the ameloblasts are of epithelial origin, the significance of vitamin A, so necessary to prevent keratinization of this type of cell, is also apparent for the formation of normal enamel.

Richardson²³ reported a study of the effect of viosterol during pregnancy on the duration of labor in primipara which should be extended by other clinicians. Two hundred and one of three hundred consecutive cases were given viosterol during pregnancy. The combined duration of labor of 132 primiparous patients who received viosterol totaled 792 hours, or an average of six hours per patient, which, he states, is one-third the length of the normal first labor. The combined duration of labor in 63 primiparous patients who were not given the vitamin totaled 1,197 hours, an individual average of 19 hours. There were 105 multiparous patients, some of whom received viosterol. He did not compare those given the vitamin with those not receiving it, but states that the average duration of labor for all the multiparous women was 3.5 hours, which is lower than the average time. He also states his belief that loss of blood at parturition was less in the viosterol treated women which he attributed to increased coagulating power of the blood and more adequate clamping off of the vessels as a result of improved muscle tone.

Wilder and Howell³⁰ point out that the majority of human cases of parathyroid enlargement occur in the northern part of the United States, where there is a deficiency of sunshine. Several investigators have described extraordinary enlargement of the parathyroids in chickens deprived of vitamin D. This problem should be further investigated, as should also the possible relation of mastitis to vitamin D deficiency. This condition seems to be rare in the south, both in humans and in cows, whereas it occurs frequently in the northern states.

The Antipellagra Factor.—There is unanimity of opinion among investigators that pellagra is due to some dietary deficiency, which has been called vitamin B₂, P-P factor, and vitamin G. For some years it was generally believed that a form of dermatitis in the rat which is caused by inadequate diet was the analog of human pellagra. This is now known to be a mistaken view. Maize, which has generally been abundant in the diet of the human pellagrin, prevents or cures the rat dermatitis. The factor necessary for the prevention of the rat dermatosis is now called vitamin B₆. The nature of the substance or substances, a deficiency of which causes human pellagra, is entirely unknown. The administration of liver, yeast, or wheat germ, produces cures, the former, often dramatic changes in the patient. Some studies with liver fractions seem to indicate that pellagra is due to double deficiency of unknown substances. The experimental status of our knowledge in this field does not warrant further discussion here.

Vitamin E.—The most striking function of vitamin E is in the prevention of death and resorption of embryos in the rat, which invariably occur in its absence. The ordinary sex cycle in the rat is in no way interfered with when the vitamin is deficient in the tissues. In the male, prolonged deprivation of vitamin E results in sterility. Concentrates of the vitamin have been prepared from lipid extracts, especially from wheat germs, which were effective in rat tests in doses of 0.1 mg. daily. Lettuce is a good source of it. It has not been obtained in pure form.

Vogt-Moller²⁷ has investigated the treatment of sterility and habitual abortion in human subjects by means of wheat germ or wheat germ oil. He controlled his experiments by applying treatment only to those cases where examination of the man and the woman showed apparently normal conditions. In twenty-three cases of habitual abortion which were treated, the birth of a living child was obtained in seventeen. Further studies in this field are highly desirable.

Other Vitamins.—The existence of more than twenty water-soluble vitamins has been suggested by as many investigators, but most of the experiments on which such suggestions were made antedate the

discovery of the importance of riboflavin and of the rat antidermatosis factor B₆. So far as one can determine from our present knowledge, it appears that the human requirements for water-soluble vitamins are limited to B₁, C, riboflavin, and one or more antipellagra factors. The chick antidermatosis factor is demonstrated to be different from the rat antidermatosis factor, and it has not been determined whether the anti-blacktongue factor essential for normal nutrition in the dog, corresponds with one of these rat or chick factors.

There is a disease of chicks described by Elvehjem in which crater-like ulcers in the lining of the gizzard are characteristic. Pork lung was found to be the most effective of several foods for the prevention or cure of this disease, but the active substance could not be readily extracted by any solvents tried.

There is a so-called hemorrhagic disease of poultry, characterized by hemorrhage similar to those seen in scurvy, but ascorbic acid does not prevent the disease. Green feeds effect a prompt cure. The nature of the nutrient a deficiency of which causes this disease is unknown.

There is also a disease of poultry called nutritional encephalomalacia which has been described by several workers. It appears to be caused by deficiency of a fat-soluble substance, since Pappenheimer and Goetsch have effected a 20-fold concentration of it by making an alcohol-soluble fraction of soy bean oil.

When we consider that animals may fail nutritionally because of deficiency of any one of nine to fourteen amino acids (five have not been thoroughly studied), or deficiency of any one of at least twelve inorganic elements essential in nutrition, as

well as from vitamin deficiency, it is remarkable that so many advances in our knowledge of the components of the normal diet have been made within forty years. Experimenters are now in a very favorable position to extend their discoveries more rapidly than at any time in the past. We may confidently look forward to a complete solution of the problem concerning the nutritive requirements of different species of animals within a few years.

Bibliography—Lecture I

1. BLACKFAN, K. D.: *Jour. Pediat.*, 3:679, 1933.
2. COWGILL, G. R.: *The Vitamin B Requirements of Man*. Yale University Press, 1934.
3. COWGILL, G. R., and GILMAN, A. Z.: *Amer. Jour. Physiol.*, 95:537, 1934.
4. ELSOM, K. O.: *Penn. Med. Jour.*, 37:87, 1933.
5. FRAZIER, C. N., and HU, C. K.: *Brit. Med. Jour.*, 2:113, 1934.
6. FRIDERICIA, L. S., and HOLM, E.: *Amer. Jour. Physiol.*, 73:63, 1925.
7. FUSON, R. C., and CHRIST, R. E.: *Science*, 84:295, 1936.
8. GÖTHLIN, G. F.: *Nature*, 134:569, 1934.
9. HIGGINS, C. C.: *Jour. A. M. A.*, 104:1296, 1935.
10. HOLMES, H. N., and CORBET, R. E.: *Science*, 85:103, 1937.
11. HUTTER, A. M., MIDDLETON, W. S., and STEENBOCK, H.: *Jour. A. M. A.*, 101:1305, 1933.
12. JEANS, P. C., and ZENTMIRE, Z.: *Jour. A. M. A.*, 106:996, 1936; *ibid.*, 108:451, 1937.
13. KARRER, P., SCHOPP, K., and BENZ, F.: *Helv. Chim. Acta*, 18:426, 1935.
14. KING, C. G., and MENTEN, M. L.: *Jour. Nut.*, 10:129, 141, 1935.
15. KUHN, R., and WEYGAND, F.: *Berichte*, 67:B-1939, 1934.
16. LUNIN, N.: *Zeitschr. f. physiologische Chemie*, 5:31, 1881.
17. McCONKEY, M., and SMITH, D. T.: *Jour. Exptl. Med.*, 58:503, 1933.
18. MIDDLETON, W. S.: *Ann. Int. Med.*, 6:352, 1933.
19. MINOT, G. R.: *Ann. Int. Med.*, 3:216, 1929.
20. O'BRIEN, J. R., and PETERS, R. A.: *Jour. Physiol.*, 85:454, 1935.
21. O'CONOR, V. J.: *Jour. A. M. A.*, 104:1298, 1935.
22. PREBLUDA, H. J., and McCOLLUM, E. V.: *Science*, 84:488, 1936.
23. RICHARDSON, G. C.: *Ill. Med. Jour.*, 65:367, 1934.
24. STRAUSS, M. B.: *Jour. A. M. A.*, 103:1, 1934.
25. SWEET, L. K., and K'ANG, H. J.: *Am. Jour. Dis. Child.*, 50:699, 1935.
26. THOMPSON, R. H. S., and JOHNSON, R. E.: *Biochem. Jour.*, 29:694, 1935.
27. VOGT-MOLLER, P.: *The Lancet*, 2:182, 1932.
28. WALD, G.: *Jour. Gen. Physiol.*, 19:351, 1935.
29. WIDENBAUER, F.: *Klin. Wochenschr.*, Berlin, 14:608, 1935.
30. WILDER, R. F., and HOWELL, L. P.: *Jour. A. M. A.*, 106:427, 1936.
31. WOLBACH, S. B.: *Jour. A. M. A.*, 108:7, 1937.
32. YAVORSKY, M., ALMADEN, P., and KING, C. G.: *Jour. Biol. Chem.*, 106:525, 1934.
33. YOUNG, J. B.: *Jour. A. M. A.*, 108:15, 1937.

II. The Mineral Elements

When one examines spectrographically the ash from the body of an animal it is found to contain small quantities of many inorganic elements. Those which have been reported present in animal and plant tissues should be distinguished in two groups, viz.: those which are known to play physiological rôles, and are indispensable in the diet; and those whose significance to the organism have not been proven. The first group in-

cludes sodium, potassium, calcium, magnesium, chlorine, iodine, phosphorus, sulfur, iron, manganese, copper and zinc and apparently cobalt. If any one of these elements is omitted from an otherwise adequate diet, failure of nutrition will supervene. Although our knowledge of the symptomatology of uncomplicated inorganic element deficiency diseases is still incomplete, it is clear that in such states the mode of

failure of the animal is characteristic for each element. Inorganic deficiency syndromes are fully as dramatic, and fully as important, from the standpoint of human health, as are certain of the vitamin deficiencies.

The second group of inorganic elements found in the body, whose importance is open to question, includes: aluminum, antimony, arsenic, barium, bismuth, boron, bromine, cesium, chromium, fluorine, germanium, gold, lead, lithium, mercury, nickel, rubidium, selenium, silicon, silver, strontium, tin, titanium, and vanadium. It is known that boron is essential for plant growth, and it may play a physiological rôle in animal nutrition, but the decision cannot be made on the basis of existing knowledge. Only three of this list of elements, boron, bromine and vanadium, are suspected of being important in animal physiology. Since it is almost impossible to prepare a diet adequate in all respects but free from one of these elements, the experimental demonstration of their importance or unimportance, in a nutritional sense, is extremely difficult. That further studies in this field are important is supported by the fact that the necessity for normal nutrition, of copper, manganese, zinc and cobalt, has been experimentally demonstrated within ten years.

Most, if not all, of the chemical reactions associated with the life processes are the resultants of integrated chemical transformations. In these biochemical reactions the inorganic or mineral elements play fundamental rôles. The profound significance of the ions of sodium, potassium, calcium, magnesium and phosphate, on irritability of the nervous system, and on other physiological processes is well known. I shall here attempt only to call to your attention some of the recent findings in researches in this field.

Deficiency of iron is of widespread occurrence. Until recently it was believed that the total amount of iron in a foodstuff represented available iron. It has been shown by Hill¹¹ that hematin iron is not available to the body. He has shown that forms of iron which are not capable of utilization by the body for hemoglobin formation, e.g., hematin iron, et cetera, may be determined by its property of not re-

acting with α , α -dipyridyl reagent. Iron which does react with this reagent is believed to be available in nutrition. Using this method, Elvehjem, Hart and Sherman⁷ found that the iron of wheat, oats and yeast was available in nutrition to the extent of 47, 57 and 47 per cent, respectively. Since, even on the basis of an assumed iron requirement of 0.015 gm. per day for man, it was long ago appreciated that many dietaries containing a high quota of refined cereals did not provide enough of this element. The low availability of much of the iron of our common foods makes this element a special problem to the physician. Elvehjem and his co-workers, on the consideration of taste, toxicity, et cetera, select ferric pyrophosphate as a compound of iron having many fine qualities. Its iron is easily available, but it is held in such firm combination that it does not produce astringent effects, so characteristic of other iron salts. Since it is soluble in neutral solutions it may be especially useful in cases of anemia with achlorhydria. It seems probable that some modification of prevailing methods of iron administration might well be considered.

Mention has been made of the integration of the chemical reactions in living tissues. An interesting study illustrating this fact in its relation to iron utilization has recently been described by Orten, Smith and Mendel.²² They restricted rats to a diet qualitatively complete, but supplying the essential inorganic elements at a low level. This extreme restriction of inorganic constituents of the diet produces significant alterations in the concentration of pigment and of erythrocytes in the blood. There occurs a progressive increase in the number of erythrocytes per unit volume of blood and a simultaneous decrease in the concentration of hemoglobin. The diet was deficient in calcium and was somewhat lower in its content of iron than is believed essential for normal nutrition. It was less deficient in sodium, potassium, phosphorus, magnesium and chloride. They sought to discover the nature of the specific inorganic deficiency responsible for the polycythemia, and concomitant anemia, observed in the low-salt animals, since other animals fed the same basal ration supplemented with a complete salt mixture at an appropriate level, were free from anemia. The addi-

tion of more sodium, potassium, magnesium or chloride, failed to improve the blood picture in the anemic rats. Administration of additional iron resulted in improvement of the blood in some but not all animals. They observed, however, that the provision of more calcium to the anemic rats, on the iron- and other essential mineral-deficient diet, had a markedly beneficial effect. Under the conditions of the experiment the provision of iron was not so consistently effective, as the provision of calcium, in correcting the polycythemia and concurrent anemia.

The widespread occurrence of anemia, the presence in foods of much iron not in an assimilable form, and the frequency of deficiency of calcium in the average dietary, may now be correlated in a very interesting way. It is suggested, also, that the observations of Strauss²⁵ that vitamin deficiency syndromes are more likely to occur in persons who suffer from alcoholism, chronic vomiting, voluntary restriction, or therapeutic restriction of the diet, diarrhea or dysentery, because of conditioning of the digestive tract such that absorption of food substance is inadequate, also suggest the etiology, and refractoriness of certain hypochromic anemias, which do not well respond to iron therapy. The clinician may well study the effectiveness of combined calcium and iron therapy.

There is evidence that iron utilization is defective when the body's reserves of ascorbic acid are depleted. That anemia occurs in scurvy is well known, but it has been attributed by some to undernutrition and hemorrhage, though increased blood destruction has been suggested as an additional factor. Mettier and others¹⁹ state that in adults with scurvy the pronounced anemia often encountered can be promptly relieved by providing fruit, green vegetables, and fresh liver, foods rich in vitamin C. There is reticulocytosis and rapid regeneration of blood. Neither large doses of iron nor the substance potent in pernicious anemia appear to accomplish these effects.

Now Dunlop and Scarborough⁶ report the treatment of a man whose income was but \$4.00 per week, and who subsisted on \$1.50 per week for food. He had eaten bread, syrup, margarine, corned beef or smoked sausage, cheese and tea made with

sugar and canned milk. In a year and a half he had taken no fresh vegetables, potatoes, fresh milk or fruit. He had symptoms of scurvy. His iron intake was estimated to be 10. mg. daily, or about two-thirds of his requirement. He was kept on his usual diet and given 60 mg. daily of ascorbic acid. Blood corpuscles increased during seventeen days from 2,050,000 to 4,226,000, and the hemoglobin from 45 to 77 per cent. After this he was continued on his usual diet, but no more ascorbic acid was administered, yet in eleven weeks the corpuscles increased to 5,600,000, and the hemoglobin to 100 per cent. Pain ceased in two days after giving the ascorbic acid, and improvement of health continued for ten weeks after it was stopped. Dunlop and Scarborough conclude that vitamin C deficiency may be a factor producing anemia among working people even in the absence of scurvy.

The iron requirements of man have been estimated by several investigators. Daniels and Wright⁵ believe that 0.6 mg. of iron, and 0.1 mg. of copper per kg. of body weight suffice for the maintenance of normal growth of children of four to six years. Farrar and Goldhamer⁸ conclude that 5 mg. of assimilable iron daily is sufficient for normal adult males. Macy and Hunscher¹⁸ suggest that 20 mg. of assimilable iron daily are necessary for the pregnant woman.

Copper.—After the demonstration of the necessity of copper for the utilization of iron in the body, several investigators have attempted to determine the daily requirements of this element, and to inquire concerning the content of copper in various foods. The consensus of opinion is that the ratio of copper to iron should be about 1:5. Hawksley¹⁰ has studied many cases of anemia in children to learn of their response to copper therapy. He cites the case of an infant with nutritional anemia in which iron therapy over a period of six weeks was ineffective. The addition of copper was followed by a rapid return to normal of the erythrocytes and hemoglobin. Before administration of copper, a Price-Jones curve showed the cells to be of microcytic type; after copper treatment the mean diameter of the cells became normal. In his experience about one case in twenty of nutritional anemia in infancy suffers from

copper deficiency, and all such cases show microcytosis.

The copper content of normal human blood varies from 0.185 to 0.229 mg. per 100 ml., and is of the same order in other species. This element is fairly evenly divided between plasma and corpuscles. Hawksley states that the copper content of the blood in pernicious anemia, Banti's disease, acute myelogenous leukemia, chronic lymphatic anemia, malaria, nephritis, carcinoma, tuberculosis, and polycythemia vera, was normal or above normal in all cases studied analytically. It appears from fairly numerous food analyses, that copper deficiency is not likely to occur in human nutrition, and that therapeutic administration of this element will be effective only in the exceptional case.

Manganese.—That manganese is an essential element in nutrition was shown by Orent and McCollum²⁰ who employed a diet the ash of which was spectrographically free from this element.

On the manganese-free diet, young rats grow to maturity in an apparently normal manner. The females, as shown by the technic of Evans and Long, involving daily examination of vaginal smears, go through normal estrual cycles. They produce approximately the normal number of young if mated at proper intervals with normal males. These females, deprived of manganese, failed in fifty-eight of fifty-nine cases to suckle their young. They appeared indifferent to them and did not give them the care or opportunity to suck which is characteristic of female rats on the same dietary formula with small amounts of manganese added.

These manganese-free females, when given foster young from our stock litters failed in eight cases out of ten to suckle them, although the vigorous young were very aggressive because of hunger. The seven young reared by the other two females were retarded, apparently from insufficient milk supply.

Female rats of our breeding stock did not show interest in and therefore did not give an opportunity for the young of manganese-free mothers to suck. But seven of 107 manganese-free young were reared by stock foster-mothers. These were undersized and of inferior appearance although

the litters were small and in all likelihood secured all the milk they wanted.

Male rats raised on a manganese-free diet showed no abnormality other than testicular degeneration. This degeneration is well under way by the 100th day on the diet. The atrophy then rapidly progresses until only vestiges remain and complete sterility results. There is little or no obesity in these males.

The same manganese-free diet, after the addition of 0.005 to 0.05 per cent of manganese in the form of the chloride kept males in sexual potency for at least fourteen months. Their testes appeared normal at the end of the experiment.

Manganese is absent (spectrographic test) in the young of manganese-free mothers. It is present in new born and fifteen-day-old rats of mothers on manganese-containing diets. Manganese therefore passes through the placenta if present in the mother's blood. It is also absent from the organs of rats raised on the experimental diet.

Manganese plays no rôle in blood regeneration.

Daniels and Everson⁴ employed a milk-iron-copper-manganese diet on which they reared fifth generation young with approximately 100 per cent viability. The same diet without added manganese contained (i.e., cow's milk) 0.03 mg. of manganese per liter. On the latter diet, eight first generation females produced 103 young; forty-seven in first litters, thirty-three in second, and twenty-three in third. These young were sired by stock males, since male rats on a manganese deficient diet become sterile within about 100 days. Of these 103 young, forty-one either were born dead or died within two hours; twenty-five were anesthetized for analysis, and thirty-seven were transferred to stock mothers. Sixty-nine per cent of these subsequently died within a few days; twelve were raised by two females (six each) to weaning weights of 53.7 and 41.5 gm. respectively. In marked contrast to these results, were the young of fifth generation females restricted to milk-iron-copper-manganese. One hundred per cent of these were reared with an average weaning weight at twenty-eight days of 69.2 grams, a weight corresponding to young of the breeding stock.

Mother rats on the manganese-deficient diet, which had lost their young at birth,

were able to suckle 96.9 per cent of foster young from the stock colony, to average weaning weights of 58.7 gm. From these observations and those of Orent and McCollum, it is evident that fertility persists in female rats restricted to a diet so low in manganese that the young are not normally nourished *in utero*, and are debilitated at birth. The diet of Orent and McCollum was much lower in manganese than that of Daniels and Everson, which may account for the lower capacity of their rats to suckle stock young. Kemmerer and others¹² observed estrual disturbances in manganese-depleted mice, whereas Orent and McCollum²¹ found that rats on their almost manganese-free diet, capable of inducing sterility in male rats in about 100 days, continued to have normal estrual rhythm as shown by vaginal smears.

There appears to be no evidence that manganese deficiency occurs in man, but it is quite possible that it may do so. Manganese deficiency, severe enough to cause serious malnutrition, is common in young chickens, as has been shown at the Cornell University Experiment Station.

In an investigation of the cause and prevention of so-called perosis, an anatomical deformity of the tibial metatarsal joint of young chickens, Wilgus and co-workers²⁶ found "that the common C. P. grade of calcium carbonate, hydroxide and chloride as well as of mono-, di- and tri-calcium phosphates and of mono-sodium phosphate aggravated the occurrence of this disorder to about the same extent as steamed bone meal.

"On the other hand, a technical grade of mono-calcium phosphate actually possessed a preventive rather than a causative effect. A spectroscopic examination of this salt showed the presence of considerable manganese and traces of iron. A qualitative analysis indicated the presence of aluminum as well. The subsequent addition of an equivalent amount of manganese, 0.0025 per cent, to a basal diet containing 0.0010 per cent demonstrated that this element was responsible for the preventive action of this salt. This amount of manganese was found to be quite effective in preventing perosis at levels of 1.0 and 1.2 per cent of calcium and at levels of 0.8 and 1.2 per cent of phosphorus. The addition of a mixture containing 0.0025 per cent each of manga-

nese, aluminum and iron was entirely preventive at the lower calcium and phosphorus levels and had a slight beneficial effect on growth. Further results showed that aluminum and zinc had a similar but less effective preventive action. The perosis preventing property of common feed stuffs was roughly in proportion to their manganese content.

"It is concluded that perosis is due to the lack of certain inorganic elements, of which manganese is notable, and that its occurrence is aggravated by an excess of calcium and probably of phosphorus."

Cobalt in Nutrition.—Bertrand and Machebœuf² determined the quantity of cobalt in various human tissues. Expressed as milligrams per kilogram of fresh tissue, the cobalt content was: Fat less than 0.010, muscle 0.025, stomach 0.030, brain 0.040, uterus 0.080, liver 0.250, kidney 0.250, pancreas 0.350, spleen 0.470. Cow milk contained 0.015 mg. of cobalt per kilogram. Bertrand¹ noted the presence of considerable amounts of cobalt in insulin preparations. Simultaneous injection of small quantities of cobalt and insulin into rabbits or dogs markedly increased the action of insulin on the blood sugar.

Orten and co-workers,²³ in 1932, showed that administration of cobalt to rats restricted to a milk-iron-copper diet, caused marked polycythemia. This observation has been confirmed by others. Lines¹⁴ reports that a condition in sheep, known as "Coast disease" in South Australia, characterized by anemia, loss of weight and appetite is relieved by the administration of minute amounts of cobalt nitrate. Stare and Elvehjem²⁴ have reared rats on a milk-iron-copper and manganese diet and found that the entire body contained less than 0.01 mg. of cobalt. They state that the presence of 0.04 to 0.05 mg. of cobalt in the entire body of a rat was sufficient to produce marked polycythemia. Such evidence as we possess seems to indicate that cobalt is an essential element, and that extremely small amounts of it suffice for normal nutrition. The evidence is conflicting. Fisher and Scott⁹ were unable to detect cobalt in the pancreas of cattle of any age, and Blumberg and Rask³ could not detect cobalt in milk by the spectrograph.

Iodine in Nutrition.—The continuing interest of investigators in the rôle of iodine

in relation to health is indicated by the fact that in the years 1931 to 1936, inclusive, 387 titles are listed in an abstract journal under this element as the key word. These contributions, while affording much interesting and useful information, contribute little that is novel, or fresh as to viewpoint. A study by Lang¹³ is of particular interest. He states that goiter did not develop in rats kept in the laboratory on soils from goiterous regions. When the soil was ordinary peat, goiter of the hyperthyroid type appeared in which the goiterogenic factor is suggested to be female sex hormone, of which there were 500 mouse units per kg. of fresh peat.

McCarrison¹⁵ found that diets with a deficiency of several vitamins were more goiterogenic, than those which lacked only one, but dietetic factors alone were not sufficient to account for the occurrence of goiter in experimental animals. Lymph adenoid goiter was produced in rats on a vitamin deficient diet even though there was an adequate ingestion of iodine, but was not observed when the diet was supplemented with yeast or cod liver oil. Goiter due to calcium excess was prevented by increasing the iodine content in proportion to the calcium excess. Surveys, he states, did not show that goiter was due entirely to an iodine deficiency. He believes that iodine deficiency is favorable to certain types of goiter, but not essential to any type. The goiterogenic action of cabbage, and other *Crucifera* is connected with the presence of cyanogen compounds, as was shown by Chesney. There are no important new researches on the significance of such foods in the etiology of goiter. It has been demonstrated, however, that keeping the reserves of ascorbic acid in the body high exerts a protective action against their influence on the thyroid gland.

The prophylactic value of iodized salt has now been tested for a sufficiently long time to make clear its value. The present status of prophylaxis against simple goiter can best be illustrated by quotations from McClendon and from McClure.

McClendon¹⁶ reports a letter from Dr. Eggenberger giving his experience over an eleven-year period on the prophylactic use of iodized salt in Switzerland. His conclusions are:

- "1. Iodine in very small quantity is a food.
- "2. Of all kryptotrophic elements of the human body, iodine is the first of which we now know the necessary quantity for daily use. This is about 1 or 2 γ for every kilogram of body-weight (γ = microgram, the millionth part of a gram).
- "3. If the average daily intake is under 1 γ /kg. in any part of the world, the danger of goiter in man exists.
- "4. If the average intake is near 2 γ there is no danger at all of goiter, even though the susceptibility to goiter is increased by infectious disease or high fat or high cabbage diet.
- "5. Experiments to show freedom from goiter without sufficient iodine-supply have often been made without chemical analysis of iodine intake.
- "6. The extended natural comparative studies in Switzerland (v. Fellenberg), Holland (Reith) and U. S. A. (McClendon) and the most successful results of prophylactic measures against goiter in Appenzell prove that goiter is indeed a symptom of iodine deficient disease, what Marine, Kimball, Lenhart and others have proved long ago. Goiter can easily be avoided with iodine in the salt, in the proportion of 1:100,000 for daily use."

McClure¹⁷ discussed the Michigan experience in the prophylactic use of iodized salt in relation to goiter. He points out ". . . that years ago this method of prevention by the use of iodized salt was tried in both Switzerland and France and then given up, owing to the fact that Breuer, Kocher and others came to the belief that iodine might do more harm than good, and cases of iodine hyperthyroidism were described in 1900.

"In this country, in 1907, Marine and his associates reported that iodine is necessary for the normal function of the thyroid. This work stimulated a trial of iodized salt in this country. McClendon is responsible for considerable knowledge of the distribution of food iodine with special reference to goiter. He, too, has charted the iodine supply in different parts of the states.

"In Michigan iodized salt was introduced through the grocery stores by the efforts of the Pediatric Section of the Michigan State Medical Society in 1924. The results in Detroit and Southern Michigan which we have studied are astounding, as viewed from the number of enlarged thyroids amongst the school children and also the number of patients coming to operation for the three types of goiter—colloid, adenomatous and hyperplastic. In 1924 the survey by Kimball in different parts of Michigan showed a very high incidence which has always been endemic here. In Detroit it was not as high as in other parts of the states, but even here there was an incidence of 35 per cent of enlarged thyroids in the school children. In the eleven years that have passed, this incidence has gradually decreased, until now less than 1 per cent of our school children have enlarged thyroids. After two years with the use of this salt the number of goiter operations in the seven largest hospitals in Southern Michigan began to decline, but the total of all operations performed showed but little change.

The following conclusions are reached from our studies here.

- "1. Iodized salt as used in Michigan did at first apparently increase the number of thyroid operations.

"2. The increase was in the nodular goiter or adenoma group, and we believe the iodized salt may have activated a group of quiescent adenomata, producing toxic goiter symptoms.

"3. The increase reached its peak in the second year after the introduction of iodized salt.

"4. An increase in the death rate from goiter as shown by the Board of Health statistics reached its peak in the second year after the introduction of iodized salt.

"5. There was no increase in hyperthyroidism, excepting in the nodular goiter or adenomata group.

"6. The number of operations for toxic diffuse and toxic nodular goiter has rapidly and steadily decreased after the apex of the second year increase had been reached.

"7. The incidence of endemic goiter or enlarged thyroid has been reduced almost to nil since iodized salt has been so widely used.

"8. We now see no cases which show the slightest ill effects from the use of iodized salt.

"9. Toxic nodular goiter and toxic diffuse goiter are less apt to occur when there has been no previous enlargement of the thyroid (endemic goiter); at least this would seem a safe conclusion based on our experience."

Magnesium.—My associates and I have given considerable attention, during recent years, to the study of the effects of magnesium deficiency in the rat and dog. We were able to reduce the content of magnesium in an otherwise adequate diet, to 1.8 parts per million. On this diet young rats respond within twelve to fifteen days with a reduction of the magnesium content of the blood from the normal of about 2.5 mg. per 100 c.c., to less than half this value. This diminished magnesium in the blood brings about a striking chain of symptoms—vasodilation, acceleration of the heart beat, and convulsions, ending in death. The only change in the composition of the blood other than magnesium, which we have been able to detect is marked increase in the cholesterol ester level. The blood calcium remains normal. The animals are hyperirritable, and respond to much smaller electrical stimuli than do normal ones. This syndrome necessitates the expansion of the term tetany to cover what we have termed "low magnesium tetany." A few clinical investigators have reported low values for magnesium in human subjects suffering from hyperirritability. This field should invite further exploration.

In my remarks I have mentioned calcium and phosphorus metabolism only incidentally. This is because there have been no very fundamental researches in this field during the past few years. The action of the hormone of the parathyroid glands as a regulator of calcium in the blood, and the

relation of vitamin D to the phosphate content of the blood, and to calcification of the osseous system, are well established, but the most fundamental researches, viz., those which reveal how these substances accomplish these effects, remain to be made.

Except for the fact that it has been shown by the Wisconsin group that zinc is an essential element for normal nutrition, nothing is known about the rôle of this element in physiologic processes, nor the pathological effects of its deficiency.

Thus far I have discussed only those mineral elements which play physiological rôles—the indispensable ones in the diet. There are two mineral elements which have come into prominence during recent years, viz.: fluorine, and selenium, which are widely distributed, and constitute health hazards. There are more than 100 localities in the United States, where the drinking water contains more than two parts of flourine per million. Some waters used for drinking contain considerably more than this. Such waters cause mottling of the teeth of children.

Selenium is known to occur in soils in South Dakota, Wyoming, Nebraska, and Kansas in amounts which create a serious problem in the rearing of farm animals, which are fed solely on home-grown produce, and may constitute a human health problem. Wheat grown on a soil containing two parts per million of selenium, contains, in the grain, as much as twenty-five parts per million. Smith and co-workers have recently reported a study of 111 families in South Dakota, which strongly suggests that this element is taken by many in quantities detrimental to health. The discussion of these non-essential elements would be beyond the limits which I must set for these lectures.

Bibliography—Lecture II

1. BERTRAND, G.: Science, 64:629, 1926.
2. BERTRAND, G., and MACHEBOEUF, F.: Compt. rend., 182: 1305, 1926.
3. BLUMBERG, H., and RASK, O. S.: Jour. Nutrition, 6:285, 1933.
4. DANIELS, A. L., and EVERSON, G. J.: Jour. Nutrition, 9:191, 1935.
5. DANIELS, A. L., and WRIGHT, O. E.: Jour. Nutrition, 8:125, 1934.
6. DUNLOP, D. M., and SCARBOROUGH, H.: Edinburgh Med. Jour., 42:476, 1935.
7. ELVEHJEM, C. A., HART, E. B., and SHERMAN, W. C.: Jour. Biol. Chem., 103:61, 1933.
8. FARRAR, JR., G. E., and GOLDHAMER, S. M.: Jour. Nutrition, 10:241, 1935.
9. FISHER, A. M., and SCOTT, D. A.: Biochem. Jour., 29: 1055, 1935.
10. HAWKSLEY, J. C.: Proc. Roy. Soc. Med., 27:1066, 1934.
11. HILL, R.: Proc. Roy. Soc. Med., London, Series B, 107:205, 1930.

12. KEMMERER, A. R., ELVEHJEM, C. A., and HART, E. B.: *Jour. Biol. Chem.*, 92:623, 1931.
13. LANG, T.: *Zeitschr. ges. Exper. Med.*, 95:378, 1935.
14. LINES, E. W.: *Jour. Counc. Sci. Indust. Res. Austral.*, 8:117, 1935.
15. MCCARRISON, R.: *Rep. Internat. Conference on Goiter*, Berne, August, 1933. Hans Huber, Berne.
16. MCCLENDON, J. F.: *Science*, 81:381, 1935.
17. MCCLURE, R. D.: *Science*, 82:370, 1935.
18. MACY, I. G., and HUNSCHER, H. A.: *Am. Jour. Obstet. and Gynecol.*, 27:878, 1934.
19. METTIER, S. R., MINOT, G. R., and TOWNSEND, W. C.: *Jour. A. M. A.*, 95:1089, 1930.
20. ORENT, E. R., and McCOLLUM, E. V.: *Jour. Biol. Chem.*, 92:651, 1931.
21. ORENT, E. R., and McCOLLUM, E. V.: *Jour. Biol. Chem.*, p. 101, 1932.
22. ORTEN, J. M., SMITH, A. H., and MENDEL, L. B.: *Jour. Nutrition*, 12:373, 1936.
23. ORTEN, J. M., UNDERHILL, F. L., MUGRAGE, E. R., and LEWIS, R. C.: *Jour. Biol. Chem.*, 96:11, 1932.
24. STARE, F. J., and ELVEHJEM, C. A.: *Jour. Biol. Chem.*, 99:473, 1932.
25. STRAUSS, M. B.: *Jour. A. M. A.*, 103:1, 1934.
26. WILGUS, JR., H. S., NORRIS, L. C., and HEUSER, G. F.: *Science*, 84:252, 1936.

EMPHYEMA AND ITS MANAGEMENT*

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Since the World War empyema has been a disease of great interest to the medical profession. Because of the high mortality in our army camps, the Empyema Commission was created by the Surgeon General. This Commission formulated three cardinal principles which still form the bases of modern day therapy. These principles are:

1. Avoidance of creating an open pneumothorax in the formative stage of the disease.
2. Sterilization and obliteration of the empyema cavity.
3. Supportive measures to raise the resistance of the patient.

To successfully treat a case of empyema requires the continued interest and attention to the medical, surgical and roentgenological aspects of the disease. During the past eighteen years numerous variations in the surgical technic of treatment have been advocated by leading authorities and for years the question of open and closed drainage has been frequently discussed. Each method has its particular indication and merit. Those surgeons having considerable experience in treating empyema by either method have reached one fundamental conclusion, namely, that the type and severity of the pneumonic process preceding the empyema, determines the mortality. Closed drainage as a preliminary or sole method of treatment is not given support by many, but if strict adherence to details is practiced,

excellent results will follow, especially in children. In institutions with limited medical and nursing supervision, open drainage with rib resection probably gives the best results. Until the pneumonic process has subsided repeated aspirations are of paramount importance to tide the patient over the critical period of cardiac and respiratory embarrassment. Aspiration as a sole method of treatment is possible only in the rare case. In attempting to treat empyema by repeated needle aspirations, there is the obvious danger of allowing the optimum time for surgery to slip by with its subsequent complications, such as chronic empyema, septicemia, tendency to recurrence, failure of the lung to re-expand, and metastatic lesions.

Mortality Rates of Pneumonia and Empyema (Graph I)

In the ordinary case of empyema with a full cavity, the site of drainage is either the seventh or eighth interspace in the mid-axillary or posterior axillary line. In localized empyema, naturally, drainage must be in the area of localization.

It is well recognized that the institution of open drainage should be delayed longer when the organism is the streptococcus than when the infection is from pneumococcus. In the former, one usually has a full cavity

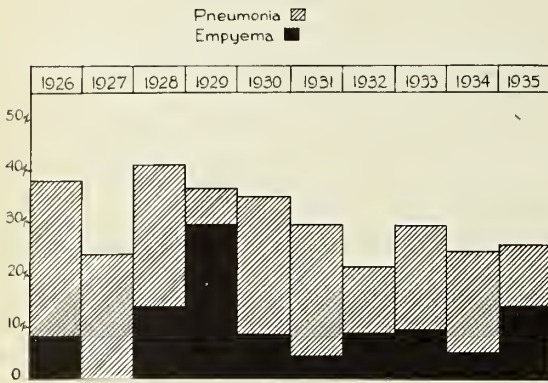
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and adhesions are slow in forming to prevent lung collapse.

Mortality Rates
of
Pneumonia and Empyema



Graph I.

In a large series of cases treated over a number of years, it has been our practice in treating empyema in children, to employ a method of surgical drainage which combines the principles of closed and open drainage. Briefly this is as follows: Aspiration is repeated up to the stage when frank pus (pea green) is obtained. At this time the trocar-cannula-catheter method of closed drainage is instituted under local anesthesia with the patient supported in a sitting position by a nurse. The catheter is clamped between aspirations so that a closed system is maintained. The empyema cavity is aspirated in the operating room up to the point where reflex coughing or a small amount of blood tinged pus appears in the syringe. The patient is then returned to the ward. There has been no evidence of shock, circulatory or respiratory distress. Further aspirations are carried out every four hours by the house officers or graduate nurses trained in this technic. The majority of cases in the earlier years of this series were irrigated with 0.5% sodium hypochlorite solution (Dakin's Solution) following aspiration of the pus; in the later years, irrigations have been used less often with no material difference in prolonging the morbidity. It is observed and reported by others, that with this type of closed drainage there may be some leakage of pus around the tube, however, this occurs at a time when the empyema cavity is practically empty,

and should be no cause for alarm or delay in changing the catheter. The original catheter is left in place from twelve to eighteen days, when it is cut and allowed to remain as an open drain. In the event there is clinical evidence of fluid, the catheter is replaced by a larger tube. It may be necessary to use local or nitrous oxygen anesthesia before inserting the larger tube, since this lessens the mental trauma in a child who has been seriously ill. We have not found it necessary in more than ten years involving a series of 407 children to resort to rib resection for adequate drainage except in the following cases:

1. Four patients developed recurrent empyema after the procedure outlined but later made good recoveries.
2. Eleven other patients:
 - A. In five the pus was too thick for catheter drainage as the initial treatment.
 - B. Six infants (1926-1927) reason not recorded.

In this group of fifteen patients, the average mortality was 6.7% and a mean morbidity period of 78.9 days.

Number and Mortality of Cases
of Empyema

Number of cases (hatched bar) Total cases 407
Number of deaths (solid black bar) Average mort. 10.3%



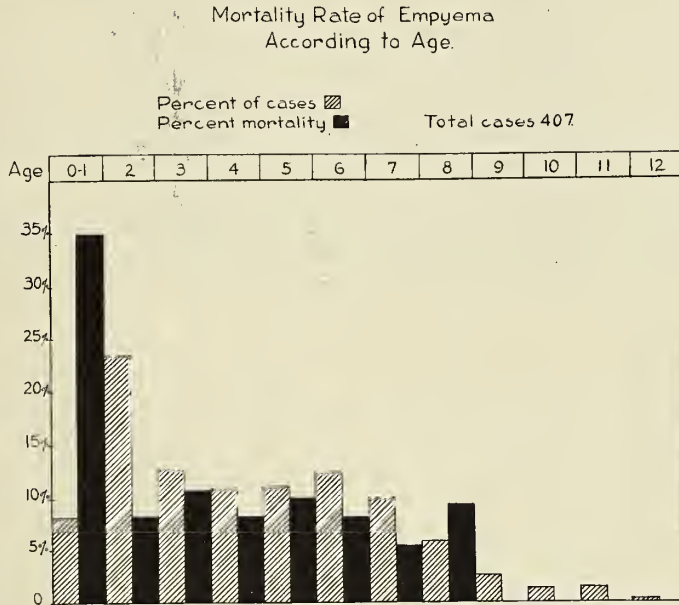
Graph II.

Number and Mortality of Cases of
Empyema (Graph II)

In this series of 407 children with empyema treated by the method described from 1926-1936, 365 recovered with good clinical results, except the fifteen patients previously mentioned. It is well recognized that the highest mortality of empyema is encountered in children under two years of

age, as is shown in Graph III. The average mortality of this group of 407 children treated during this ten year period was 10.3 per cent. During the past two years it has been our practice to institute closed drainage in children two years or younger, as

requires open drainage with rib resection, if the patient survives the shock of the initial fulminating pleural infection. With this type of empyema there is an anaërobic infection which is very liable to rapidly invade the soft tissues of the chest wall after either



Graph III.

soon as pus is obtained by aspiration. They will not withstand the period of waiting for thick pus to form because of their extreme liability to acidosis and subsequent vomiting.

Mortality Rate of Empyema According to Age of Patient (Graph III)

There were three cases of chronic empyema in this group of 407 children who required a major surgical procedure; one required an unroofing of the empyema cavity with a subsequent good result; one with a tuberculous empyema and mixed infection recovered by using closed drainage followed by a two stage thoracoplasty; the remaining patient died from surgical shock following a decortication of the visceral pleura.

The treatment of empyema in adults differs but slightly from that of children, the technic of closed and open drainage works well in most cases, but rib resection may have to be done more often in adults to obtain good surgical drainage.

Empyema which is due to sudden rupture of a large pulmonary abscess into the general pleural cavity causing a putrid empyema

needle aspirations or the closed type of catheter drainage. Therefore, *the latter type of treatment is contraindicated* because experience has shown that this fulminating cellulitis of the chest wall usually is a fatal complication; *early open drainage with rib resection is the treatment of choice in these cases*. If the lung abscess has ruptured slowly into the pleural cavity or the point of rupture has been small, adhesions usually are formed and lead to an encapsulated putrid empyema. This type of empyema responds to open drainage and rib resection with subsequent healing of the associated pulmonary abscess.

All patients with empyema require strict attention to their nutritional needs. There is usually an associated secondary anemia which is best treated by repeated small blood transfusions since they greatly fortify the patient and tend to markedly reduce the period of morbidity.

In those patients with a large pneumothorax persisting after removal of the pus and in whom re-expansion of the lung has been slow, we have materially shortened the period of morbidity in the past two years

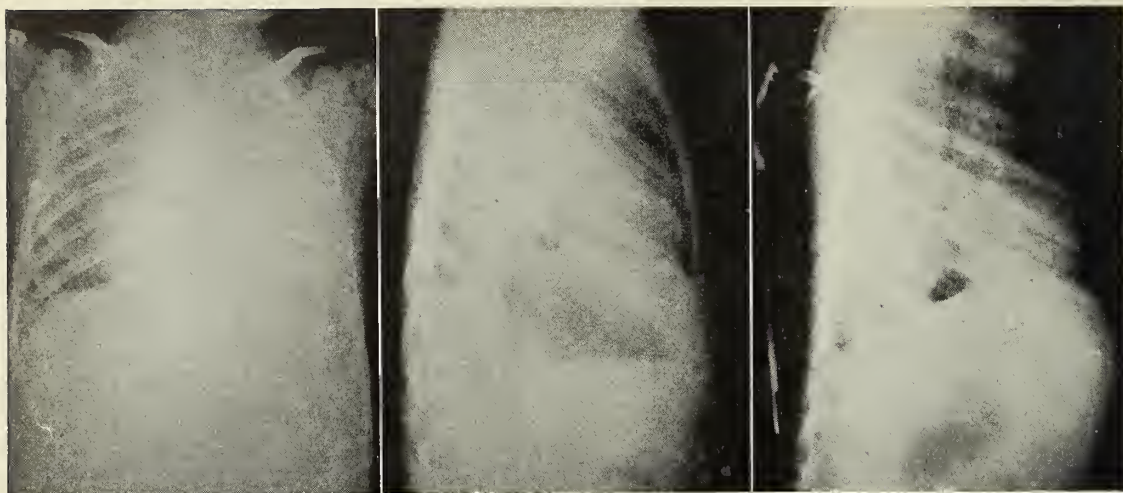


Fig. 1 (left). Anteroposterior radiograph of the chest shows uniform density of the left lung field with some displacement of the heart and mediastinal contents to the right, indicating a pleural effusion. From this radiograph, one would not be able definitely to outline the location of the fluid.

Fig. 2 (center). A lateral projection, with the left side nearest the film, demonstrates the presence of the fluid in the interlobar space. This illustrates the necessity of making films in the lateral projection to determine more accurately the location of the fluid accumulation. In this instance, if the lateral film had not been made, thoracentesis would undoubtedly have been attempted in the posterior axillary line region, too far posteriorly and beneath the fluid.

Fig. 3 (right). The position of the catheter in the pleural space after drainage had been instituted. The catheter was introduced in the mid-axillary line region between the sixth and seventh ribs.

by applying the Wangenstein method of suction.

Presentation of Cases

Case 1.—A young woman, age eighteen, white, was admitted to the hospital January 13, 1936, with history of having had an upper respiratory infection one month previously. This was followed by a bronchopneumonia involving the left lung. On admission her temperature was 102 degrees, pulse 130, respiration 18 per minute. The pneumonic process was complicated by fluid in the left chest and a portable x-ray examination of the chest was taken two days before entrance to the hospital and this showed an extensive empyema on the left side. The organism was found to be streptococcus on culture by diagnostic aspiration. Closed drainage was performed under local anesthesia on January 14, the site being in the eighth interspace in the left posterior axillary line. Within twenty-four hours the temperature and pulse were normal and remained so. On January 26 (two weeks) the patient was up in a wheel chair and the catheter was cut on February 5 and left as an open drain. The patient was discharged on February 7 and on February 14 a fluoroscopic examination of the chest revealed that there was no fluid in the left pleural cavity and the lung to be 80 per cent re-expanded. The tube was removed on this date and the patient went on to an uneventful recovery.

Comment.—This case was interesting in that the streptococcus empyema was drained using only the initial catheter drainage with subsequent recovery.

Case 2.—A white man, aged thirty-six years, was admitted to the hospital on November 27, 1935, with a history of having had a right lower and middle

lobe pneumonia, the onset occurring four weeks previously. On admission the temperature was 100 degrees, pulse 110, respirations 20. He had had a fever ranging from 100 to 104 degrees daily for two weeks and the right pleural cavity had been aspirated twice during the past ten days; thick creamy pus being obtained. Examination of the chest revealed dullness and absence of breath sounds at the right base, posteriorly. X-ray examination of the chest with anteroposterior and lateral films revealed an encapsulated empyema posterior to the right posterior axillary line. The pus on aspiration was very thick and on culture pneumococci were found. An open intercostal drainage without rib resection was instituted in the ninth interspace posterior to the right post-axillary line under local anesthesia. There was profuse drainage for twenty-four hours and within three days the temperature was normal and remained so. This patient had a very severe secondary anemia when admitted: Hemoglobin 40 per cent. Red blood cells 2,200,000. White blood cells 23,000. Polymorphonuclear cells 92 per cent. Two transfusions of 200 c.c. of blood were given by the indirect method on successive days. On December 13 the empyema cavity measured 15 c.c. and on December 21 an x-ray examination of the chest revealed no fluid level. Two days later the empyema cavity measured 10 c.c., therefore, the tube was removed and the patient discharged on December 30. This patient was up and about his home and returned to work on January 15, 1936.

Comment.—This patient was very septic and anemic on admission to the hospital. This case illustrates the need for anteroposterior and lateral x-rays of the chest to locate the proper site for surgical drainage. The period of morbidity and disability was approximately forty-five days.

Case 3.—A white male child, aged four years, was admitted to the hospital on April 3, 1936, with a history that he had had an upper respiratory infection two weeks previously followed by a left lower lobe pneumonia.

Examination upon entrance to the hospital, temperature was 102 degrees, pulse 120 and respirations 30. There was dullness in the left chest posteriorly with absence of breath sounds. An x-ray examination revealed slight displacement of the heart to the right and a slight clouding of the left side of the chest. A diagnostic aspiration was performed in the seventh interspace in the posterior axillary line and clear fluid which was negative on culture was obtained. White blood cells, 37,000. Polymorphonuclear cells 96 per cent. On April 9 fluoroscopic examination revealed the fluid to be encapsulated in the left interlobar region but a daily fever of 100 to 102 degrees continued, with a white count varying from 25,000 to 30,000 with 85 per cent polymorphonuclear cells. On April 23 he was transfused with 100 c.c. blood by the indirect method. X-ray examination of the chest with anteroposterior and lateral films revealed a shadow still present in the left interlobar region. On April 29 the trocar-cannula-catheter method of surgical drainage was done under local anesthesia. The trocar was inserted in the eighth interspace in the left axillary line; 75 c.c. of pea green pus was aspirated at this time. An x-ray examination of the chest on May 11 showed no fluid to be present, the temperature was normal and the general condition of the patient excellent. The catheter was cut and allowed to remain as an open drain at this time and the tube removed. He was discharged the next day, the lung being completely re-expanded with no evidence of fluid in the chest. Examination on June 24 disclosed the left chest to be normal.

Comment.—This case represents an instance of interlobar empyema and again emphasizes the importance of taking *lateral films* of all cases of empyema so that the location of the fluid may be accurately ascertained before operative procedures are undertaken. The period of morbidity was approximately six weeks but only 19 days elapsed from the time of surgical drainage to complete recovery.

Case 4.—A white man, forty-six years old, was admitted to the hospital February 5, 1936, with a severe pneumonia of the right middle and lower lobes. This was of a possible embolic nature from a previous thrombophlebitis of the right saphenous vein. During the course of the pneumonia he was very ill and cyanosed, necessitating the use of an oxygen tent for about one week. At the time of consultation (March 19) the temperature was 104 degrees, pulse 120 and respirations 20. There was dullness on percussion and an absence of breath sounds at the right base in the right axillary line and the pus on culture was found to be pneumococci in type; the pus was pea green with some fibrin. On March 20 a closed drainage was instituted under local anesthesia in the 8th interspace in the right axillary line. About 150 c.c. of pea green pus was aspirated in the operating room. Following this the temperature receded but varied from 99 degrees to 101 degrees daily. On March 24 the temperature ranged from 100 to 104 degrees as formerly. He had a very severe distressing cough and

there was ineffectual drainage through the tube. The positive pressure within the pleural cavity was so great that it was impossible to maintain the drainage tube in the pleural cavity, therefore, on March 28 under nitrous oxide anesthesia about 1.5 inches of the eighth rib was resected in the right axillary line and open drainage instituted. There was adequate drainage but there was evidence of bronchopleural fistula, therefore, irrigations were not done post-operatively. The temperature gradually became lower varying from 98.6 to 101 degrees daily until April 15 when there was no drainage and the tubes were removed. Following this the temperature returned to normal and remained so. An x-ray examination of the chest on April 15 showed no fluid level but a pneumothorax cavity measuring about 300 c.c. On April 20 there was no evidence of a bronchopleural fistula, and he was allowed to be up and out of bed on April 23. He was discharged from the hospital on April 27 there being no drainage from the wound at that time. An x-ray examination of the chest done on May 18 showed complete obliteration of the empyema cavity. He had gained 30 pounds in weight and was told that he could return to work.

Comment.—The origin of the primary pulmonary pathology was probably embolic in nature because of the previous acute thrombophlebitis of the right saphenous vein. Closed drainage was ineffectual because of the high intrapleural pressure secondary to the broncho-pleural fistula which healed spontaneously after adequate drainage was obtained by rib resection and open drainage. The fact that the temperature remained normal after the tubes were removed indicated that their presence created sufficient irritation to cause a low grade daily fever. The period of hospitalization was approximately five weeks, from the time the empyema was first drained until his discharge.

Case 5.—A white man, aged forty-three, was seen in consultation at his home on November 3, 1936, with a history that six weeks ago he had had a tonsillectomy. Two days after the operation pain was noticed in the left chest and since that time he has continued to run a fever. For the past three weeks he has expectorated small amounts of purulent sputum. Examination at this time revealed a moderately well nourished patient, who appeared quite septic. Temperature was 102°, pulse 110, respirations 20. There was limited expansion noted on the left side of the chest. There was dullness at the left base posteriorly with absence of breath sounds. An x-ray examination on the previous day revealed fluid in the left pleural cavity posteriorly. Patient was again seen on November 5 and at this time 500 c.c. of foul, purulent fluid was aspirated from the left pleural cavity. A diagnosis of lung abscess which had perforated and formed a localized empyema of the putrid type was made. He was transferred by ambulance to the hospital on November 8 and an open drainage with resection of the eighth rib in the left posterior axillary line was performed. About eight ounces of foul pus immediately escaped from the empyema cavity and this was

cultured and the organisms found were pneumococci and numerous spirochetes (mouth organisms). Two large soft rubber tubes were placed in the empyema cavity and adequate drainage was obtained. The temperature immediately dropped to normal within forty-eight hours and his general condition was greatly improved by small blood transfusions. Patient was allowed up in the chair on November 27 and an x-ray examination of the chest on December 4 revealed no fluid in the left pleural cavity but a pneumothorax cavity which measured 120 c.c. The tubes were removed on December 7 and the patient was discharged home on December 8. Since that time he has made an uneventful recovery and an x-ray examination on December 13 revealed slight thickening of the pleural surface at the site of the former empyema, the lung was completely re-expanded and there was no evidence of fluid.

Comment.—This case was interesting in that the empyema which was of the putrid type following the rupture of a lung abscess went on to an uneventful recovery as soon as adequate surgical drainage was instituted. In this case the repeated small blood transfusions undoubtedly hastened his recovery.

Summary

1. The three fundamental principles propounded by the Empyema Commission still form the basis of our modern therapy of empyema.
2. A uniform method of treatment combining the principles of open and closed surgical drainage is presented.
3. Four hundred and seven children with

empyema were treated by this method over a ten year period with a mortality of 10.3 per cent.

4. There is a definite parallelism between the mortality of pneumonia and empyema in any given series of cases treated over a period of years.
5. The frequent use of fluoroscopic and roentgen observation is very necessary in the follow-up period of treatment to gain the best results.
6. In treating empyema, individualism must be practiced since each patient demands his own particular form of therapy.
7. Cases are presented illustrating the various types of empyema and their subsequent treatment including results.

References

1. Empyema Commission of the United States Army: Cases of empyema at Camp Lee, Va. Jour. A. M. A., 71:366-443, 1918.
2. Graham, E. A., and Berck, Maurice: Principles versus details in the treatment of acute empyema. Ann. Surg., 98:520, (October) 1933.
3. Mason, J. M.: Acute empyema in children. Jour. A. M. A., 105:1114-1118, (October) 1935.
4. Heuer, G.: Acute empyema. Jour. Thoracic Surg., 1: 461, 1932.
5. Wangenstein, O. H.: Observations on the treatment of empyema, with special references to drainage and expansion of the lung. Jour. Thoracic Surg., 4:399, (April) 1935.
6. Rienhoff, W. F., Jr., and Davison, W. C.: Empyema in children under two years of age. Arch. Surg., 17: 676, 1928.
7. Penberthy, Grover C., and Benson, Clifford D.: A ten year study of empyema in children, 1926-1936. Ann. Surg., 104:579-584, (October) 1936.

SERUM TREATMENT OF PNEUMOCOCCUS PERITONITIS

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The management of pneumococcus peritonitis has remained a subject of considerable debate for a good many years. That the mortality is high is universally accepted. It is therefore of considerable importance that any clarification of the various adjuncts to treatment of this disease be as complete as possible.

In 1926 Lipshutz and Lowenburg² reported twenty-three cases with a mortality of 100 per cent. They state: "Pneumococcus antisera, Types I, II and III, are useless in combating the mortality." May it be noted that they used the unconcentrated sera in much smaller dosage than is now in vogue. In 1931, Duncan¹ reported thirty-four cases with a mortality of 57 per cent. He states: "The use of antiserum is wholeheartedly recommended." Various standard text books of medicine and surgery com-

ment on the use of antisera, some advocating and others discouraging its use. The subject therefore remains in a decidedly unclassified state.

In this paper is presented the data of a case of pneumococcus peritonitis in which serum therapy, using the modern Felton concentrate intravenously in large dosage,

JOUR. M.S.M.S.

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was employed. There seems to be no doubt whatsoever that in this case at least, great benefit, if not curative value, was derived from the procedure. In the final evaluation

scribed as being a very toxic, sick looking child who was quite drowsy. There was slight nuchal rigidity and extreme generalized abdominal tenderness with considerable voluntary spasm. The remainder of the physical examination was negative.

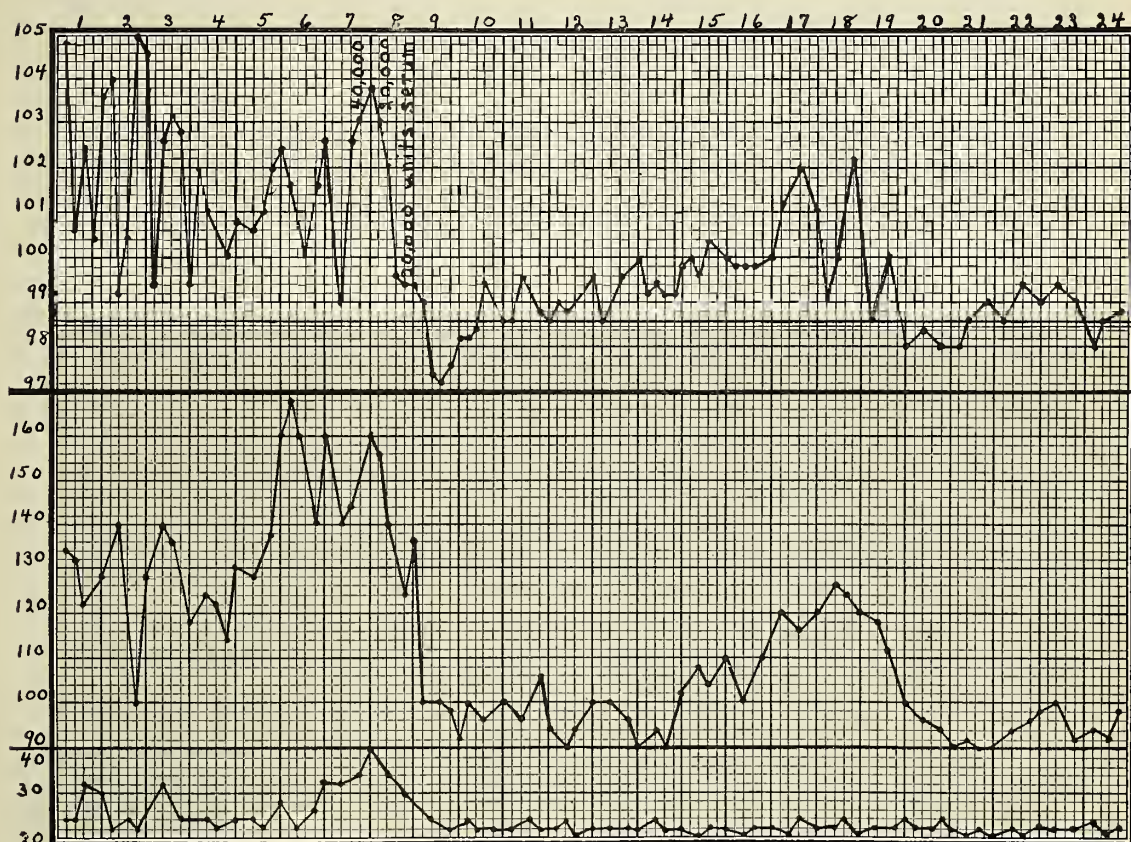


Chart I.

of such a method of treatment only a large series of cases so treated will make possible accurate analysis; but it may be reasoned that if undisputed value is evident in any one case, considerable value is to be derived in any similar case.

Case Report

A school girl, aged nine, entered Harper Hospital July 16, 1936. She had been at camp for two weeks. On July 12, 1936, she was seen by her mother who noted that she looked tired, but no complaints were elicited. At 3:00 A. M. the day of entry, she was awakened with severe lower abdominal pain. She soon vomited and it was noted she was feverish. Some headache and stiffness of the neck were admitted. There was no complaint of coryza, cough or diarrhea. Her tent-mate had been taken to the hospital with pneumococcus Type I pneumonia two days before her own entry.

Her past history was unimportant except that she had had infantile eczema.

The physical examination revealed a temperature of 104.8° F., pulse 136, respiration 24. She was de-

Laboratory reports were as follows: July 16—Blood count: red blood cells 4,190,000, white blood cells 9,900; polymorphonuclear cells 83; large 12, small 5. Urine: Negative. Spinal Fluid: Clear, no cells. Negative globulin. Sugar: .091. Kahn: Negative. Throat culture: Miscellaneous bacteria. X-ray examination of chest: Negative for circulatory or pulmonary disease.

July 18—Blood count: White blood cells 23,200; polymorphonuclear cells 95; large 5.

July 20—Blood culture reported positive to pneumococcus Type I.

As indicated by the chart, the patient continued to run a high temperature. A diagnosis of primary pneumococcus peritonitis was made and conservative management instituted. Six days after entry, the temperature was 103.8° F., pulse 142, and respiration 32. She was semi-comatose and her condition was considered critical. On consultation, it was decided to give pneumococcus serum in spite of a history of allergy. Therefore, 80,000 units of Felton's pneumococcus Type I serum was administered intravenously in three doses within twenty hours. As shown by the temperature chart, within twelve hours of the last dose the temperature was 97.4° F., pulse 100, and respiration 22. There was a slight subsequent rise over the following few days,

and on the seventeenth and eighteenth days the temperature reached 102° F. At this time it was thought a localized abscess was forming in the left lower abdomen. One day there was slight blood-stained discharge from the vagina. The abdominal localization did not materialize and, as shown by the chart, she was discharged from the hospital on the twenty-fourth day of her illness. Her recovery was complete and without any further complications.

I believe the data on this patient are conclusive that serum therapy is of value and always to be considered a part of one's armamentarium in the therapy of pneumococcus peritonitis. As is the case in the serum treatment of pneumonia, large doses are probably essential to proper results. It is extremely interesting in this case that in spite of the fact serum was given on the sixth day of the disease, spectacular results were obtained. It has been said by various writers dealing with specific type pneumonia that the serum is of little value unless given early. Such would not seem to be the case in this instance. Early diagnosis, however, must be of great value in this disease. And since it is essential to obtain the spe-

cific type before serum can most efficiently be used, material for bacteriologic diagnosis must be obtained as soon as possible. Various methods for rapid diagnosis of blood stream invasion have been used and are to be recommended. For some years it has been the practice in certain hospitals to use abdominal paracentesis so that material may be obtained early for a positive diagnosis. Such a method is to be recommended for certainly in many cases the specific type could be determined by such a procedure within twenty-four to thirty-six hours after hospital entry. Time alone will justify any undue enthusiasm which might arise from this one case, and a true evaluation of serum therapy in this disease must await a large series of carefully controlled and vigorously treated cases.

Bibliography

1. Duncan, J.: Primary Peritonitis. *Can. Med. Assoc. Jr.*, vol. 24, p. 778, 1931.
2. Lipshutz, B., and Lowenburg, H.: Pneumococcic and Streptococcic Peritonitis. *A. M. A.*, vol. 86:No. 2, p. 99, 1926.

CLINICAL STUDY WITH INSULIN PROTAMINE*

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This study was undertaken to determine the value of insulin protamine in severe cases of diabetes mellitus where treatment with standard insulin was unsatisfactory. The investigation includes seven ambulatory cases of diabetes mellitus of long standing, seen daily at the city physicians' office.

Blood sugar determinations were made daily except Saturday and Sunday, and the proper amount of insulin prescribed for the day. The blood sugars were reported twenty-four hours after they were taken, and immediately upon receipt of the report, the insulin dose was prescribed; for example, a blood sugar determination taken on May 15, 1936, was reported to the physician on the morning of May 16, 1936, at which time he ordered the insulin dosage for May 16, 1936. The protamine insulin in all but one of these cases (Case 1, W. P.) was given before the evening meal, and to prevent severe reactions, the insulin before breakfast of the next day was omitted. The material used was supplied by Eli Lilly & Company, the insulin being dissolved in a protamine prepared from the

sperm of *Salmo Iridius*, the same material used for investigation and reported in the *Journal of the American Medical Association* on January 18, 1936, by Drs. H. C. Hagedorn, B. Norman Jensen, N. B. Krapup, and I. Wodstrup of Copenhagen, Denmark.

Case Reports

Case 1.—W. P., aged fifteen. When this patient was two years old, it was discovered that he had diabetes mellitus. At the age of four years, he was brought from Texas to Detroit, Michigan, where he was put on a diet. At the age of five years, he was taken to University Hospital, Ann Arbor, Michigan, where he was given a high fat diet, no insulin. He spent from six to eight months of each of the next five years in University Hospital. During one

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of these visits, insulin was started, and some improvement was noted. The patient then returned to his physician in Detroit. He was given a high CH diet and insulin. Marked improvement was made. The physician died and the child was not treated regularly, although the mother attempted to follow previous directions. For five years no blood sugars were taken. At the age of twelve or thirteen, patient's mother realized that the child had ceased to grow. Several physicians were consulted, but no treatment was suggested.

On January 8, 1936, the child was registered at City Physicians' Office. At the time of registration, his height was 4 feet, 10 inches; weight, 78 pounds; basal metabolism, plus 9 per cent. The patient followed a diet of CH 215 gm., P 78 gm., F 123 gm., with 40 units of U 20 insulin medication, previous to the clinical investigation with blood sugar tests—results obtained ranged from 240 to 400.

Clinical investigation with insulin protamine was begun on April 6, 1936, with 16 units of insulin before lunch and 16 units insulin protamine before bedtime—gradually being brought up to 38 units of insulin and 20 units of insulin protamine. On the twelfth day of the investigation, the blood sugar registered 110. During the next fourteen days, the blood sugar fluctuated between 110 and 220. Another increase in insulin, 40 regular and 20 insulin protamine, brought the blood sugar to 70, where it remained for a week and was followed by a violent hypoglycemia, necessitating hospitalization. Upon recovery the dosage of insulin was dropped to 28 regular and 20 insulin protamine—blood sugar fluctuating between 80 and 160.

His present weight is 95 pounds, and the height is 60½ inches. He reports improvement in general well-being.

Case 2.—G. B., a white woman, thirty-two years old. The diagnosis of diabetes mellitus was made at the age of twenty-eight years. Patient was given a "no sweets" type of diet with insulin. Two years ago, she was hospitalized and given a high fat diet with insulin. She was hospitalized again one year later and was given a very low caloric diet, approximately one thousand calories. Her maternal aunt and uncle were also diabetic.

On November 12, 1935, patient registered at City Physicians' Office. Previous to our clinical investigation, seven blood sugar determinations were made, ranging from 66.6 mg. to 380 mg. per 100 c.c. blood. The maximum dose of insulin was 60 units of U 40 daily.

The clinical investigation started on April 6, 1936, with 10 units of insulin protamine and a corresponding decrease of regular insulin. By a gradual increase of insulin protamine and a decrease of regular insulin, the blood sugar was reduced to 122. The dosage at present is:

No insulin before breakfast
10 units regular insulin before lunch
20 units insulin protamine at evening meal.
The blood sugar fluctuates from 67 to 110, with the usual Monday rise.

Patient states that since the new insulin was started, she has been free from a "constant sensation of hunger." This patient's menses, absent for three and one-half years, returned during the first week of treatment, and she has been menstruating regularly since.

Case 3.—H. M., aged seventeen. This case was diagnosed as diabetes when the patient was twelve years old. The family was visiting in Philadelphia when Hilda became ill. She was admitted, in a state of coma, to a Philadelphia hospital, where she

remained two weeks. Insulin was administered, and patient was given high CH-low fat diet. Upon her return to Detroit, patient was attended by a private physician for six months. Patient's father heard about "Electro-Vita" mineral water, which was "very good for diabetics." Patient dieted (as instructed in Philadelphia) and took insulin along with the mineral water, but did not see a physician.

At the end of six months, the patient lost so much weight that her parents expressed alarm to the mineral water salesman, who referred them to a physician who also recommended said water for diabetics. Upon his order, insulin was discontinued. At the end of three months the patient had not gained weight. She then went to some other physician who administered a special medication for diabetic patients, and gave her a diet, but no insulin. The patient continued to lose weight during this time. For the next nine months the patient treated with an osteopath who gave her a very low caloric diet and suggested a starvation period of three days. Her weight went down to seventy-five pounds, and the parents became alarmed. They then gave her a diet similar to the first one she had, and started insulin, too.

The patient registered at the City Physicians' Office on October 11, 1934. She has been taken to a hospital, in a state of coma, twice.

Clinical investigation started on April 6, 1936. The patient weighed 120½ pounds when she registered at the City Physicians' Office; 134½ pounds at the beginning of the investigation; her present weight is 132¼ pounds (fasting). Previous to this investigation, twenty-two blood sugar determinations were made—four of them were less than 200 mg. per 100 c.c. blood, and five were between 300 and 400 mg. per 100 c.c.

The investigation started with the same procedure as the two previous cases. The dosage of insulin at present is as follows:

None in the morning
20 of U 40 before lunch
20 of U 40 and 25 units of insulin protamine at the evening meal.

The result is that the blood sugar fluctuates between 55 and 213 per 100 c.c.

This patient was most difficult to control; although she was intelligent and conscientious about dieting.

Case 4.—T. A., aged forty-two. This case was diagnosed in 1925 (eleven years ago) as diabetes mellitus. The patient was hospitalized shortly afterward for one month in the University Hospital at Ann Arbor, Michigan, where he was given a high fat diet. He was again admitted to the same hospital in 1929, this time being treated with a high fat diet and insulin. Upon his return to Detroit, he went to a clinic. Again, in 1929, he was hospitalized in Harper Hospital, Detroit, Michigan.

The patient registered at the City Physicians' Office in January, 1934. In 1935, his diet was changed to a fairly high CH diet.

The patient states that he feels better with the administration of insulin, but constantly feels weak.

Before the case was diagnosed as diabetes mellitus, the patient weighed 136 pounds. During 1929, after administration of insulin, he reached a peak weight of 166 pounds. At the beginning of this study, his weight was 147 pounds. At the present time, he weighs 140½ pounds (fasting).

Previous to this study, thirty-seven blood sugar determinations had been made in this clinic, of which three were under 200 mg. per 100 c.c. blood, and three were over 300 mg. per 100 c.c. The maximum dose of insulin was 165 units of U 40 daily.

The present investigation started on April 6, 1936, with immediate improvement. The blood sugar readings remained low throughout the period except for concurrent infections: (1) Nasal; (2) bronchial; (3) abscess. His insulin dosage at present is:

None in the morning
5 units of U 40 at lunch
25 units of insulin protamine at night.

Blood sugar readings for the last month are 53 to 133 per 100 c.c. of blood.

Case 5.—R. S., a white male of fifty-two years. The diagnosis of diabetes mellitus was made sixteen years ago. No definite history of diabetes in the family. The patient states, however, that his father died from "some kind of kidney trouble." This patient treated with an osteopath for nine years. During this time he was on a high carbohydrate diet with insulin. He has been hospitalized once for a period of two weeks. For a period of time, he attended a local clinic, gained in weight and felt good.

The patient registered in the City Physicians' Office on October 15, 1935. His weight at the time of registration was 156½ pounds; at the beginning of this study, April 27, 1936, his weight was 160½ pounds; his present weight is 154½ pounds (fasting).

Blood sugar taken before investigation started fluctuated between 55.8 and 178 per 100 c.c. of blood; diet consisted of CH 131 gm., P 70 gm., F 113 gm., with 60 units of U 40 insulin.

This clinical investigation started April 27, 1936, with 15 units of insulin protamine before the evening meal, which was followed by an immediate drop of blood sugar to 125 per 100 c.c. of blood. On May 21, 1936, food allowance had been increased to CH 166 gm., P 80 gm., and F 113 gm., without any change in insulin. The final insulin allowance is as follows:

None in the morning
10 units of U 40 at noon
15 units of insulin protamine at dinners.

Blood sugar records for the months of May, June, and July show a fluctuation between 53 and 148 per 100 c.c. of blood.

The patient reports a marked improvement in health and well-being.

Case 6.—S. R., a white Polish female of thirty-seven years, who has a family. When she was thirty years old, she had a complete physical examination. At that time, the diagnosis of diabetes mellitus was made. She was first treated by a private physician with a diet and without insulin. Later, she went to Grace Hospital Clinic where her diet was changed from a low CH, high fat to a high CH, low fat type; and insulin treatment was started.

The patient registered at the City Physicians' Office on January 26, 1934. Her weight at that time was 118 pounds. At the beginning of this study, April 20, 1936, her weight was 114½ pounds, her present weight is 113¾ pounds. Her best weight was 128 pounds, which was on December 17, 1935.

Previous to this study, seventeen blood sugar determinations were made, ten of them ranging from 250 mg. to 355 mg. per 100 c.c. blood. Her maximum dose of insulin, previous to this study, was 50 units of U 20 daily.

On the twenty-ninth day of this observation period, 38 gms. of available glucose was added to her diet.

This patient had a most stormy reaction at the beginning of the investigation. Although she did not require any hospital care, the morning insulin

reactions were quite heavy, requiring an increase in the food allowance daily. At the end of the investigation, her insulin dosage consists of:

No insulin in the morning
10 units of U 40 at noon
10 units of insulin protamine at night.

The blood sugar fluctuates between 87 and 185 mg. per 100 c.c. of blood.

The patient reports improvement with the present method of treatment.

Case 7.—C. W., aged forty-eight. This patient is a white female who has been under our observation for over three years. Although the amount needed to control the diabetes was very small—5 units in the morning, 15 units at noon, and 10 units in the evening—I was curious to see whether insulin protamine could be used in such mild cases.

Previous to the clinical investigation, her blood sugar ran from 100 to 217, with insulin ranging from 15 to 25 units a day. On June 15, insulin protamine was used to substitute for the regular insulin. Her sugar is kept down between 70 and 128 throughout by 5 units of insulin protamine.

Case 8.—H. B., aged twenty-two. The diagnosis of diabetes mellitus was made nine years ago. There is no history of diabetes in the family. The patient was treated by a private physician for two years. During this time, he was placed on the so-called "starvation" diet without insulin, accompanied by a marked loss of weight. He later consulted another physician who changed the treatment to one with insulin and a high carbohydrate diet. For the next three years, the patient felt better and gained weight. During the year 1931, tuberculosis developed, and patient was confined to his bed for six months. This was followed by monthly treatment (pneumothorax) for one and one-half years. Lungs were checked in 1933 but not since then.

The patient registered in the City Physicians' Office on April 25, 1935. Patient's weight at that time was 131½ pounds; at the beginning of this study, 137 pounds; at the present time, 135¾ pounds (fasting). His best weight was 148 pounds, on November 19, 1935.

The insulin medication up to the beginning of the present investigation was entirely unsatisfactory—diet being: CH 103 gm., P 70 gm., F 149 gm., with 60 units of U 40 insulin per day. The blood sugar ranged from 95 to 333 mg. per 100 c.c. of blood.

The clinical investigation started on April 20, 1936, substituting 10 units of insulin protamine for the evening dosage of insulin. Changes were gradually made, until on May 6 blood sugar reached 83 per 100 c.c. of blood. For the past two months he has had the following dosage:

No insulin in the morning
20 units of U 40 at lunch
20 units of insulin protamine at night.
The blood sugar records were 78 to 125.

Comments

These cases demonstrate certain factors in common:

1. Fluctuations in daily blood sugar, possibly due to frequent changes in diet.

2. A uniform Monday rise in blood sugar, probably due to lack of exercise over Sunday as well as a disturbance in dietetics due to the holiday.

3. The material used was uniformly stable for at least ten days.

4. The action of the insulin protamine is prolonged. It is shown that insulin reactions occur from twelve to fourteen hours after the injection.

5. Insulin protamine, by its slow absorption, lengthens the period a patient is free from sugar.

6. There was no improvement in the patients' weights in spite of the improvement in the blood sugar.

Conclusions

1. In the above cases, where the blood sugar could not be controlled with the regular insulin, it was stabilized by the insulin protamine.

2. We feel that this investigation is of particular value inasmuch as patients whom we have observed are constantly exposed to the ordinary routine of living with its temptations (dietary), rather than being hospitalized.

Hemolytic Jaundice: Its Diagnosis, Behavior And Treatment: Review of Forty-five Cases

William P. Thompson, New York (*Journal A. M. A.*, Nov. 28, 1936), points out that during the last six years the Spleen Clinic has studied forty-five patients presenting hemolytic jaundice. These cases have all been followed at regular intervals by this combined medical-surgical group; frequent laboratory tests have been made by technicians directly responsible to this clinic; separate records of each patient have been kept and individual patients have been pursued, when pursuit was indicated. Nearly all splenectomies have been performed by Dr. Allen O. Whipple. The Spleen Clinic, after many attempts to classify further the diseases causing increased hemolysis of red cells within the body coincident with evidence of regeneration, has finally thought it wise to accept only two subdivisions. The first of these is a uniform, recognizable, curable entity: typical hemolytic jaundice. The second subdivision consists of a heterogeneous variety of disturbances grouped together under an intentionally vague term—the atypical hemolytic anemias. In all cases of typical hemolytic jaundice the peripheral blood contains the spherical microcytes that are believed to be as pathognomonic of this disease as are the sickle cells in sickle cell anemia. Typical hemolytic jaundice is a clear cut definite disease entity, the diagnosis of which depends on the finding of spherical microcytes, with their attendant fragility changes, in the peripheral blood. Once the active phase of this disease is established it will continue, with fluctuations in intensity, until splenectomy is performed. The splenic pathologic changes are uniform and characteristic. Splenectomy results in an immediate cessation of the increased hemolytic activity with a prompt return of the blood values to normal. These brilliant results have been observed in all cases and persist without exception for as long as sixteen years after splenectomy. The atypical hemolytic anemias comprise a heterogeneous group of disturbances that are associated with increased blood destruction and splenic enlargement. In some of their cases the primary disturbance has been neoplastic, in others infectious, in many unknown. Splenectomy is not indicated in this group. Correct clinical diagnosis before operation is therefore essential.

Diagnosis and Classification of Menstrual Disorders

The experimental data of John C. Burgh, G. S. McClellan, Claude D. Johnson and Eugene T. Ellison, Nashville, Tenn. (*Journal A. M. A.*, Jan. 9, 1937), show that primary and secondary ovarian failure are capable of producing the same endometrial lesions. The clinical correlation of symptoms and endometrium indicates that there is no single endometrial lesion always associated with a specific menstrual history, although there is a general tendency for certain symptoms to predominate in certain groups. In some instances, undoubtedly, a case has been incorrectly classified, as the lines of division between the types are not always clear. Admitting these weaknesses and the fact that as knowledge advances our conception of endocrine disease will materially change, the authors nevertheless believe that the clinical data, taken as a whole, strongly support their experimental observations. They have interpreted their experiments as indicating that ovarian function can be reduced by lesions affecting the ovary or by lesions affecting the hypophysis or other endocrine glands and that the disorders of menstrual interval and flow are the result of an ovarian underfunction. The severity of this underfunction is indicated by the state of the endometrium. Their clinical and experimental observations indicate the fallacies of present treatment. Serious discrepancies arise over the relative merits of the various treatments for the disorders of flow and interval. Some put their faith in thyroid, some in extracts of pregnancy urine and others in pituitary extracts or substance. All these are good in a certain percentage of cases but fail in the majority of instances. Since evolving this conception of menstrual disorders they have treated, to the best of their knowledge, the primary focus of the disease. Their clinical impression is one of a definitely improved therapy. Surgery, of course, has been necessary in some, and the results as usual are brilliant. It should be borne in mind that, no matter how brilliant the surgical result, it is at best a symptomatic cure. The glandular disturbance is not removed, and most active surgeons will find several instances among their patients in which the symptom has been relieved surgically but the endocrinopathy remains to invalid the patient.

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*"Every man owes some of his time to the up-
 building of the profession to which he belongs."*

—THEODORE ROOSEVELT.

EDITORIAL

PREPAREDNESS

THE latter part of 1935 and the early part of last year a number of articles on the general subject of cancer appeared in this JOURNAL. The object of these papers, six in number, was to urge upon the general practitioners as well as other physicians who see cancer first, the importance of being prepared, either to deal with cases of malignancy or suspected malignancy themselves, or where physicians do not feel that diagnosis and treatment of malignancy is within their scope, to see that the patient is in competent hands before turning him away. To the average person, a doctor is a doctor, presumed to understand the healing art in its totality. He is not much concerned with the specialties into which physicians group themselves. We repeat, however, that any physician consulted should

not dismiss the patient without some definite understanding regarding the physician whom he should see.

This applies also to tuberculosis. There is a strong movement on foot for the elimination of tuberculosis. This will take a long time, much longer than the elimination of diphtheria or smallpox where there is a specific known prophylaxis.

The third problem which is facing us at the present time is the elimination of syphilis. The advice given in the first paragraph will apply to syphilis in double force. Within recent months there have appeared in many of the national magazines, articles by prominent physicians on the subject of syphilis, its cause, diagnosis and cure.

Whatever objection may be taken to the attitude of a few national magazines on the subject of socialization of medicine, there is full coöperation so far as the profession are concerned with the great majority of efforts to popularize the knowledge on cancer, tuberculosis and syphilis. The profession must be prepared to meet intelligently the demands of the public when their services are sought.

ROENTGENOSCOPY

MANY physicians doubtless feel that anything on such a subject as this can have but a remote interest for them. Such, however, is not the case. The roentgenoscope or fluoroscope, as it is usually called, is used extensively in setting fractures of the extremities. By means of the roentgenoscope, the surgeon is able to obtain a direct view of the actual bone lesion. This fact alone makes it indispensable when a complete approximation is attempted.

The roentgenoscope may prove dangerous to both the operator and patient. If the operator uses it frequently and is not careful to keep his hands out of the illuminated field, he may contract a very stubborn dermatitis, or worse, from the accumulative effects of the x-rays. Prolonged and uninterrupted use of the fluoroscope is fraught with dangers to the patient, dangers which are not immediately apparent since a leg or arm may be incased in a cast so as not to

be available to inspection for a number of days. There is probably no one more alive to the dangers attendant on x-ray examinations than roentgenologists themselves. A few precautions will make for safety. In examining the extremities by means of the fluoroscope, since the lesion is usually limited to a small area of the bone, the shutters of the fluoroscope should be closed down so that the opening does not include much more than the site of the lesion. The operator should protect his hands by means of lead rubber gloves. Since these are cumbersome, this precaution is very often neglected. Pupillary accommodation should be thoroughly relaxed, accomplished best by the operator spending at least ten minutes in a darkened room before attempting to use the roentgenoscope. Interval inspection by using the foot with the operating switch, a second on and a second off, is also advised.

Probably there is no other subject which is accorded such recurring attention in the journals devoted to roentgenology. The reader is referred to a recent paper in the January 1937, Vol. 37, No. 1, number of the *American Journal of Roentgenology* for a very thorough discussion of the subject, "The Dangers of Reducing Fractures Under the Roentgenoscope and Methods of Protection Against Them," by Stevenson and Leddy of the Mayo Foundation and the Mayo Clinic. The paper should be read by everyone who uses the x-rays either for diagnosis or for treatment. We quote two paragraphs from their conclusions.

"It cannot be emphasized enough that roentgenoscopic reduction of fractures of the extremities is a very dangerous procedure. The busy or careless roentgenoscopist may, in the course of a single reduction of a fracture, receive a severe injury to the dorsum of his fingers. He may also receive radiation below an actual erythema in quantity, which later, by cumulation, may give rise to injury of the skin. The patient at the same time may receive an erythema dose (or even an excessive dose) which may be masked by the pain of the fracture and which may not be detected because of inflammation following fracture, especially since the limb may be enclosed in a cast.

"Since the effects of roentgen irradiation are cumulative and evidence of injury may develop late, it is recommended that each operator keep a permanent record of the radiation he has received on his hands from all roentgenologic examinations. As an additional safety factor, the operator should calculate his maximal possible exposure and consider that he has received this dose even though additional protective factors may have been employed."

THE SYPHILIS PROBLEM

THE *Journal of the American Medical Association* for March 6, 1937, printed six papers on the general subject of syphilis and gonorrhea. These six papers contain a vast amount of authoritative information on the subject and doubtless they have been read by a large number of the readers of this JOURNAL. We print, however, herewith abstracts of these papers.

Clinical Problems in Syphilis Control Today

John H. Stokes, Philadelphia, brings out the fact that the League of Nations investigation brought to the dignity of statistical demonstration the fact that clinics, widely regarded as the chief instruments for the control of syphilis, are so inefficiently run the world over that 20 per cent of their early syphilis material has not received even the minimum of darkfield examination and serologic testing required by the past two decades of knowledge of the disease. Two adequate systems for the treatment of early syphilis can now be issued in black and white for public health and voluntary agents, including private physicians' reference and use; the British-Danish intermittent and the American continuous alternating. Of the two the coöperative Clinical Group and the United States Public Health Service believe they have proved the alternating continuous treatment to be the better. With new detection machinery in full movement, an enormous influx of seropositive latency is to be expected and must be evaluated and treated. Hospital, and outpatient and practitioner "pick ups" require (1) adequate complete physical examination, not mere listening through the shirt and tapping the knees; (2) with a negative physical examination the beginning of treatment, not by the first arsenical "shot" one can reach, but with bismuth subsalicylate weekly, while one gains the patient's confidence and a spinal fluid examination. For two reasons the author would place the syphilitic woman first rather than fourth among the modern problems of syphilis. Infectious early syphilis of a woman's genital tract is the *terra incognita* of the public health aspect of the disease. The relatively more benign and inconspicuous course of the whole infection, which Warthin rated as in her almost a disease in a different animal species, fills the terrain with the unexpected and unpredictable and makes epidemiologic and therapeutic certainties rare indeed. As soon as possible after the recognition of prenatal syphilis, especially of the tardive type, the spinal fluid should be examined in order to forestall the onset of grave neurosyphilis by fever therapy, precisely as one does in acquired syphilis. Few rules will thwart more tragic consequences. Of the therapy of neurosyphilis, Ravaut, who brought asymptomatic neurosyphilis to light, died ten years too soon. He suggested and would probably have shown that a great deal of neurosyphilis recovers of itself; that even the parietic formula is compatible with a long, effective and healthy life. It is clearly proved that asymptomatic neurosyphilis tends to be withheld from symptomatic expression or cured by a prolongation plus some form of intensification of standard treatment for the disease. The incidence of asymptomatic neurosyphilis is reduced practically to zero by sufficiently intensive treatment begun early in the disease. Injections of chemotherapeutic agents are merely medicated by the hand and head. Effective treatment for syphilis may indeed be mechanized to a certain perfection by knowledge. But the uprooting of the disease from

its hold on humanity is done by the eye, the voice, the understanding and sympathetic spirit, without which all the much gathering of knowledge is but the unliving dust.

The Serodiagnosis of Syphilis

H. H. Hazen, Washington, D. C., points out that a study of the tests used on the spinal fluid has revealed that certain of the flocculation tests are not suitable, although some others are just as efficient as are the complement fixation tests. Tests on patients who have been treated with malaria or with more than twelve injections of trypanamide or fifteen injections of arsphenamine show marked discrepancies in the reports of individual observers. Tests on the fluid from untreated cases of cerebrospinal syphilis show more uniform results. In general it should be noted that even in untreated patients the sensitivity of many tests is unsatisfactory. It is certain that tests on the spinal fluid must be chosen with the greatest care. From the standpoint of specificity the Brem, Eagle flocculation, Kahn diagnostic and presumptive tests, Kline diagnostic and exclusion tests, Kolmer, and Lufkin and Rytz have been found to be satisfactory. From the standpoint of sensitivity the leading tests are the Kahn diagnostic and the Ruediger tests, with the Brem and Kline diagnostic tests close behind. Syphilis can often be diagnosed by other means than serologic. It may be true that during the early eruptive period the serologic test is much the best confirmatory evidence, but in the early chancre the darkfield in skilled hands is infinitely better. The mouth contains spirochetes very similar to *Spirochæta pallida*. It is conceivable that such organisms might be found on other portions of the body, if only for a short time. In late syphilis an x-ray study of the bones or the aorta may be invaluable. In neurosyphilis there are other valuable tests on the spinal fluid in addition to the serologic ones. Women who have been pregnant frequently show a negative blood serologic test. In this class the history of repeated miscarriages, or the finding of a syphilitic placenta, are of the greatest aid. Every pregnant woman should have her blood examined for syphilis, preferably during an early period. As is invariably the rule, a laboratory procedure is a good servant but a bad master.

Modern Clinical Management of Gonorrhea

P. S. Pelouze, Philadelphia, confines his dissertation purely to the medical side of the question, suggesting that a uniform history blank should be used throughout the country. With such uniformity it would be a rather simple matter to decide on the comparative values of the different types of treatment now in use. Also, the study of such histories would do much to teach those using them far more about the disease and the things that are or are not good for it, a gain that would reflect itself in many good ways. The one in charge of a treatment center should be really interested in the disease. Lack of such interest makes for poor work and for poor personnel coöperation. It does little toward disease reduction. Younger men in such dispensaries should be compensated for the services rendered. There should be a close alliance between the chiefs of dispensaries, their assistants, their local and state boards of health and the United States Public Health Service as a means of making each one who treats the disease feel that he is a part of a campaign of disease reduction and that some one cares. So far as such a thing is possible, efforts should be made to carry out an educational campaign among

those who treat the disease. In this way interest will be stimulated and better work will result. Also, there would be built up a degree of sanity regarding the disease and its treatment that would reduce to a minimum the dangers of the exploitation of treatment methods that have little or nothing to offer. Such things retard advancement and often work to the harm of thousands of patients.

Venereal Disease Control Program in Kansas

In accordance with state laws, syphilis and gonorrhea were made notifiable diseases at the quarterly meeting of the Kansas State Board of Health in January, 1914. Earle G. Brown, Topeka, Kan., discusses the effect of the program on the incidence of venereal disease and summarizes its work from 1914 to 1935 in order that comparison may be made with the proposed program of the future. As a result of funds allotted to the Kansas State Board of Health by the United States Public Health Service under the provisions of the Social Security Act, a program is in process of development with a full-time director in charge. Dr. Wenger, following his trip to Kansas, made the following recommendations: 1. Free serologic service to all physicians by increasing the laboratory staff. 2. The addition of medical and social personnel at the three clinics; also additional equipment if needed. 3. Free neoarsphenamine and heavy metals to physicians for indigent patients. 4. Standard medical record for use in all three clinics. 5. The use of the U. S. Public Health Service classification for syphilis in all clinics to assure better material for study. 6. That an educational program for physicians be started so that they will report their venereal disease cases. 7. When more full-time health units are established throughout the state, that the venereal disease program be included. Thus the new venereal disease program is under way. There is a renewed interest in the problem of syphilis and gonorrhea, not only among professional groups but among lay groups. Within the past month each of the two newspapers in Topeka printed articles in regard to venereal disease, as compared with the previous custom of referring to them as "social diseases." It is hoped that additional treatment facilities may be provided through the development of full-time county or district health departments. There are certain areas in the state where it is considered that this would be especially advantageous.

New York State Program for Syphilis Control

In this progress report on the New York State syphilis control program, Edward S. Godfrey, Jr., Albany, N. Y., places emphasis on notification and the provisions of adequate diagnostic and treatment facilities. These two phases of the program must be developed first, together with facilities for returning delinquent infectious cases to treatment. By assisting the localities in which syphilis is most prevalent, namely, large cities, and by augmenting district staffs, it is hoped to raise the quality of treatment and to provide really adequate follow-up service. As time goes on it is believed that the problem will become less complex and that case and contact investigation can be more generally and effectively carried on. As has been said on other occasions, syphilis control presents a real challenge to physicians.

Typical City Program for Combating Syphilis and Gonorrhea

Charles Walter Clarke, New York, asserts that while the details of a modern program for com-

bating syphilis and gonorrhea will differ from city to city in accordance with the size and character of the population of each, the principles involved in the program of each should be identical, since these principles are based on accepted scientific facts. Neither educational activities nor chemical or mechanical prophylaxis have so far succeeded in reducing radically the prevalence of syphilis or gonorrhea in civilian groups, and unfortunately gonorrhea cannot be rendered noninfectious quickly and permanently by the means of treatment now generally available. This is not to say, however, that education, prophylaxis and therapy may not under favorable future conditions be effective in reducing the prevalence of gonorrhea. Syphilis, on the other hand, can be rendered temporarily noninfectious usually with a few doses of arsphenamine, and by persistent treatment almost every patient becomes and remains noninfectious. Unlike gonorrhea, second infections with syphilis are so extremely rare as not to constitute a public health problem. If every patient with early syphilis received twenty doses of arsphenamine and forty doses of a bismuth or mercury compound properly administered, and if every syphilitic woman were treated adequately in every pregnancy, acquired and congenital syphilis would soon cease to exist. While greatest emphasis should be placed on early syphilis and on syphilis as a complication of pregnancy, almost every case of syphilis that has not been adequately treated should still be regarded as being potentially infectious. With these principles in mind, the modern city program should be built up in three main divisions: (1) education, (2) case finding and (3) treatment. The necessary staff for carrying out the program for combating syphilis and gonorrhea in a city consists of an experienced and a well trained medical director assisted by physicians, nurses and clerical staff, and in larger cities by social workers, technicians, orderlies and statisticians. All members of the staff should be reasonably compensated. This, of course, includes the physicians working in the health department clinics. Voluntary service is usually unsatisfactory in one respect or another. The physicians and nurses should be specially trained or should at least be directed by specially trained supervisors. The fact should not be overlooked that local voluntary agencies such as social hygiene societies can be of great practical assistance in many aspects of this program, especially with regard to popular education, professional training and the creation of favorable public opinion.

THE MOONSTRUCK GOLFER

("The moon would be a paradise for golfers because the average golfer would be able to drive for a mile or more on its surface."—*The Astronomer Royal*.)

How nice it would be to play golf on the moon

Where gravity hinders so slightly
That the ball bounds away like a giddy balloon
And soars over bunkers most brightly.
There even the duffer could get a good drive
And without any great preparation
Could slog from the tee to the next green but five—
Which must be a splendid sensation.
And another advantage—if gravity there
Increases the scope of exertion,
Just think of the clubs that a caddie could bear,
In the course of a lunar excursion!
Fourteen as a limit, a niggardly boon,
Is mentioned in Scotland the thrifty—
But it's O to play golf with the Man in the Moon
Where the caddie could lug around fifty!

—*The Manchester Guardian*.

CURRENT EDITORIAL OPINION

For Whose Benefit?

(*Journal of the American Medical Association*)

Every proposal for change in medicine should be tested with the question "For whose benefit?" Unless the change will help, either directly or indirectly, in the fight against disease and death, it cannot be justified. The fact that it may increase the income of physicians, help pay the interest on hospital investment, or provide salaries for a body of administrators, unless it will also improve medical service, is no justification. This is a simple test, but applied strictly to many of the proposals for medical changes before the public at the present time it would elicit a verdict of condemnation.

How Many Need Help?

(*Journal of the American Medical Association*)

Within a small margin of error, about 50 per cent of the population goes through the year without any illness. Fifty per cent of the illnesses of the other half are not disabling. One half of the remainder, or about 12½ per cent, are of a minor character, such as the common cold, and involve a disability of less than a week. This leaves about 12½ per cent who have serious illness and an expense for wage loss and for medical care sufficient to constitute a real problem. Of these, many are able to meet the necessary expense from their own savings, by deferred payments or from regular income, just as they meet other extraordinary expenses. Thus it seems reasonable to assume that 5 per cent—certainly less than 10 per cent—of the total population are unable to meet their sickness expense without great sacrifice. This is still enough of a problem always deeply to concern organized medicine.

It is a testimony to the accuracy of these figures that when county medical societies have set up machinery to provide medical service for those otherwise unable to obtain it the number served has almost invariably been between 3 and 5 per cent of the total population.

Traffic Manners

(*Journal of the Indiana State Medical Association*)

Editor Dempster, of the *Journal of the Michigan State Medical Society*, in the February number strikes at the very heart of the subject of prevention of automobile accidents when he says that "the greatest single factor in the promotion of safety on the streets is courtesy or good manners. If drivers and pedestrians were as courteous on the streets as, let us hope, they are in their own homes, there would be very few casualties in comparison to the number in the past few weeks. It seems that the automobile has brought to the surface all the bad manners of which some persons are capable. Consideration for the other fellow and strict adherence to traffic signals, safety zones and other street signs, on the part of the pedestrian and driver, will accomplish more than any expensive program of survey and street widening that can be devised. Let's use common sense!"

To our notion, the above quotation includes about everything that needs to be said on the subject; it hits at the crux of the matter and if both drivers and pedestrians would hearken unto it, automotive accidents would become materially lessened.

That the disasters are ever on the increase and

that this increase will continue so long as the present conditions exist, cannot be denied. Civic and state police seem at their wits' end in their efforts to stem the rising tide of these accidents; city councils and state legislatures find themselves unable to pass laws fast enough to meet the ever-increasing number of such accidents. Our home city but a short time ago enacted what was said to be a model traffic ordinance; a perusal of it seemed to convince the most doubting of Thomases that here, indeed, was the final solution to the traffic problem in a city that held the darkest record of any city of comparable size in the nation.

Today we find the city attorney busily engaged in the drafting of a *real* traffic ordinance; it seems that the former one did not pan out, since we still hold the unenviable record among cities of our class. Most traffic ordinances of the past have been directed toward control of automotive traffic, a United States Supreme Court decision having held that the pedestrian had the right-of-way over the gas-propelled vehicles. Now, it seems, the worm has turned and it is the lowly pedestrian who is to feel the weight of the law. Jay-walking, that bane of city police, is being legally attacked in many cities; the chap who is wont to "cut catty-cornered" across the streets, is to be regarded as a menace as well he should be.

Walking across street intersections "against the light" is to be taboo. In other words, traffic is to be directed according to signal lights, where such are available.

But all these measures will not take care of the thoughtless, the ill-bred, that man who does not care; the police department will continue to have to face that person and that person will have to be taught the rights of others.

Finally, the police, as well as the courts, will have to crack down on all offenders, be they drivers or pedestrians. Further, motor laws will have to be more universal in character than at present.

Gynecologic Aspect of Human Sterility

Samuel R. Meaker, Boston, (*Journal A. M. A.*, Dec. 5, 1936) reduces the diagnosis and treatment of sterility to three fundamental principles. 1. In the great majority of cases of human infertility the cause of that defect is not some single abnormality but rather the summation or totality of several factors. A single abnormal condition may render sterile an individual and consequently any mating into which that individual may enter: this would be true of a blockade in the genital passages, for example, or of any complete impediment to the production of normal gametes. But absolute sterility is found in only about 30 per cent of clinical cases. Seventy per cent of couples who apply for the relief of childlessness show no single condition that would account for their difficulty. They do show, without exception, a group of causative factors of which each one lowers their fertility to some extent and of which the sum total depresses that fertility below the threshold of conception. 2. The multiple factors are partly genital and partly constitutional. The general or constitutional condition is fully as important as the local or genital condition. States of constitutional depression include not only endocrine insufficiencies but also various nonendocrine conditions such as chronic intoxication, metabolic disturbances of extrinsic origin, debility and general inferiority. 3. The several factors present in each case are seldom limited to one partner. The author and his associates find that, among the couples who consult them, only about 10 per cent of the husbands and 5 per cent of the wives are free from all objectively demonstrable evidence of infertility. The complex nature of human infer-

tility requires an elaborate diagnostic approach. The urologist and the gynecologist must make detailed studies of the genital organs; no less important are the services of the internist and the endocrinologist. Complete investigation of every case is necessary in order to obtain the best results; for there could be no worse fallacy than to accept the first discovered abnormality as the sole and only cause in the case under consideration, on an unjustifiable assumption that no other causative factor is present. In the past, unfortunately, this illogical procedure has been the rule. Rarities being excluded, the four important groups of gynecologic factors of infertility are female genital hypoplasia, abnormal viscosity of the endocervical secretions, partial or complete obstruction of the fallopian tubes and deficient oogenesis. Treatment is clearly indicated by a complete diagnostic study. In general, one should aim to correct all the factors demonstrated as inimical to fertility. It is essential to assure an adequate grade of male fertility before subjecting a wife to any therapeutic measures directed primarily against sterility.

THE SENIORS*

We've lived oor years sae gay, wi' cant,
We've filled oor hours wi' joy an' mirth,
Our riotous years were nae sae scant,
An' diels an' demons filled oor birth.
An' aftentimes oor heid was sair,
An' dancin' fairy tunes, were real,
An' Tom an' Bill an' mony mair
Were devil fu', frae heid tae heel.

Bit in th' sundoon o' oor lives,
Wi' "lean an' slippered" pantaloons
An' creaky bones that noo arrives,
We're mair sublime, an' richness blooms.
In faces, lonely, troubled, sair,
We see a touch o' human kin',
An' find that there are wrinkles there
Where ance we cudna see a line.

Noo we're staid an' truly Seniors
Wi' tempers smooth, nae uproarious,
We love tae sit amang oor cronies
An' crack th' jokes, ance sae glorious,
We like the veesit freen' wi' freen'
Frae 'wa back there in auld lang syne,
An' tell about th' case we'd seen
In days of mercury an' quinine.

Then, lights were unknown folderol,
An' one nicht cures for colds we had
In colocynth an' calomel
An' ginger tea an' mustard bath.
We then were free frae vitamins
An' curious quirks o' allergy,
O Lord, cud we bring back thae times
For just ane nicht sae happily.

Bit noo we've passed th' three an' ten,
They tell us that we're failin' noo,
An' that we're wanderin' doon th' hill
An' that oor cronies whom we knew
That's gone awa just recently
Wull no be lonesome verra lang,
For veesits gay an' pleasantly
We'll hae, when we've joined oop wi' them.

*The "Seniors" constitute a group of physicians in the Wayne County Medical Society who have practiced over a quarter of a century. They meet at noon luncheon once a month when, following the luncheon, a program is provided usually on some non-medical subject. The above poem was written for one occasion by Dr. William Fowler, better known as "Weelum."

President's Page

MEDICAL PHASES OF WELFARE AND RELIEF LEGISLATION

SINCE 1933, FERA Bulletin No. 7 has acted as a general guide for administration of medical care to welfare recipients. With the 1937 Legislature come recommendations from several sources for changes in the relief and welfare organization of the state and counties. A number of bills on this subject have the endorsement of the Governor's Study Commission. The important *medical phases* of welfare and relief were merely touched upon in Senate Bill 111, but were not sufficiently outlined to insure to the welfare patient the necessary medical service he may require. This was a serious omission and one which was immediately recognized by practical administrators of welfare and relief work.

The allied health group of physicians, dentists, nurses, pharmacists, and funeral directors of the state has respectfully requested several amendments in the Senate proposal to correct these inadequacies in the original draft. Important is the recommendation for a medical department supervised by a properly qualified, licensed doctor of medicine; this department should administer medical care which would include home and office care, dental service, pharmaceutical service, bedside nursing service in the home, and funeral and burial service. All qualified practitioners should be included in the list of those furnishing any health service, and every person entitled to health service should have the right to select, insofar as practicable, the practitioner of his choice. Each county should have an Advisory Committee of professional people, which practice has proven of great value to the ERA medical program during the last four years.

These medical amendments to the welfare and relief bills are important and desirable additions. They protect the health and welfare of a percentage (be it large or small) of every practitioner's clientele.

Write your legislator today, urging that he give serious consideration to the medical phases of welfare and relief when he is studying S.B. 111. He is looking for this support from you to justify his vote.



President of the Michigan
State Medical Society

DELINQUENT ACCOUNTS

HENRY C. BLACK and ALLISON E. SKAGGS

WHAT is a delinquent account? Obviously this question is not easily answered as it applies to medical accounts, because it depends upon the *normal expectancy of payment* and thus varies with the individual arrangements. The time when the creditor expects payment of an account has a very definite relation to his collections because people pay their bills largely by habit.

For instance, the man who habitually pays all his bills each month will do so without much invitation and never becomes a problem in delinquency. Then there is the man, representing by far the largest group, who pays certain bills such as telephone, light, car payments, etc., promptly because he has formed the habit, but who never pays quite all his bills at one time. The bills he pays in full every single month are invariably those firms which have so continually impressed him with the fact that they *expect* payment promptly, that he has almost unconsciously formed the habit of paying them as expected. Since this group usually furnishes the doctor a substantial part of his income it is important to help them form good paying habits, and as many of these are "good as gold," "perfectly honest," "best patients," etc., this must be done with a certain finesse or not at all.

The wide variance of collection percentages among doctors shows that some members of the medical profession have been successful in building up these paying habits. It can be done and the first step begins with the early contacts with the patient in the office. If the attitude of the doctor and his assistant indicates that "of course" prompt payment is expected, and emphasizes the value of the service, there is far less possibility of delinquency. Next in importance

is the sending out of statements promptly and regularly, but this has already been amplified in a previous article.

Then if payment has not been made after three or four statements have been sent, there is something wrong and the sooner it is discovered and corrected the better the ultimate result will be. Possibly the bill has just been neglected, or unusual expenses have made it difficult to pay. On the other hand, perhaps there has been a misunderstanding regarding the treatment and the sooner the patient is contacted the more easily the difficulty may be straightened out without unpleasantness.

Personal correspondence is a courteous and dignified method of following up statements which have been disregarded. When a patient responds giving reasons why the bill cannot be paid it should be acknowledged, and in the same manner when he fails to keep the promise to pay he should be sent an immediate reminder. By such a logical routine over a period of months and years patients can be helped to form the habit of paying doctor bills just as promptly as any others, and delinquent accounts may be largely avoided.

If several efforts to collect the account by correspondence fail to bring even a response the account should be given to a local, dependable collection agency bonded by the state, not only to collect, if possible, the small amount which might be obtained but also to make it more difficult for the patient to run up a bill somewhere else that he does not intend to pay.

Deserving patients should be given consideration but those who ignore statements, letters, and all reasonable attempts to collect the account are capitalizing on the generosity and public spiritedness of the doctor, who undoubtedly gives away more of his time and money than anyone in the community.

DEPARTMENT OF SOCIETY ACTIVITY

L. FERNALD FOSTER, M.D., Secretary

Council Chairman's

- - - Communication

THROUGH MEDICAL CHANNELS

THE old adage in the Army is that all orders or communications must go "Through Military Channels."

A few physicians are not stopping to think that in matters affecting the entire medical profession, their actions should go "through medical channels." Some take direct personal action on medical subjects of general interest without asking the advice of their county society or their state medical association. This independent activity is oftentimes embarrassing to the State Society and our parent organization, the American Medical Association.

Here is an illustration: With most praiseworthy motives, one large pharmaceutical house has been trying to arouse the medical profession by offering a certain amount of money, and urging contributions of other drug houses, to be given to the American Medical Association without any strings attached, for radio talks to inform the general public on Medicine.

I quote a paragraph from a recent letter from this drug firm: "There can be no doubt that the proposal has been received favorably by the medical profession. The next step will be to obtain necessary contributions from other pharmaceutical houses. It might be a little difficult for me, in my position, to achieve this purpose—I believe it quite possible for individual physicians and medical societies to accomplish the desired result much better."

Shall we become beggars and demand this money of the drug firms with which we deal, to tell the world about ourselves?

We are now accepting paid advertising in our State Medical JOURNAL and the *Journal of the American Medical Association* and also support at our conventions, from many

ethical and Council approved houses. Is this not asking enough?

Physicians can reciprocate by supporting these ethical firms. Read their messages in your Michigan JOURNAL; stop in their booths at our Annual Exhibition.

Another thing, please do not sign return postal cards for samples without first finding out whether the drugs are Council approved. Such solicitation embarrasses the American Medical Association as non-accepted firms enjoy saying that many doctors are using their drugs!

A good rule to remember is: obtain your information through proper medical channels, via County Society to State Medical Society to American Medical Association. This will save many embarrassing situations and in the end will be better for organized medicine.

You know that your State Medical Society and the American Medical Association are willing to do anything which will help the Medical Profession—and You.

P. R. URMSTON, M.D.,
Chairman of The Council, M.S.M.S.

BE PREPARED

EVERY effort is being put forth to acquaint the membership of the Michigan State Medical Society of the activities of the various special committees. Among these may be mentioned the Cancer Committee, the Committee for Syphilis Control, Tuberculosis, Mental Hygiene and Maternal Health.

In view of the fact that the laity are becoming immensely interested in public and personal health measures the profession should seize the opportunity to increase and direct this interest intelligently. The work being accomplished by these various committees has been publicized and commented upon from time to time. By radio, by the lay press as well as by addresses before lay organizations, men and women in all walks of life are learning that the various pathologic conditions considered by the

special committees here listed are preventable or curable, if physicians are consulted during the very early stages. It behooves the members of the medical profession to be prepared, when consulted, with the indicated care or advice. If the malady for which the physician is consulted is not within the scope of his practice, he should not feel that he has discharged his obligation to the patient until he sees that the patient is in competent hands.

The postgraduate courses to be given during the next few months as well as prepared booklets on various subjects will afford ample opportunity to qualify. The crusade against preventable disease will not be a matter of weeks or months, it will affect the entire future of medicine. The watchword is "Be Prepared."

COUNCIL AND COMMITTEE MEETINGS

1. *February 28, 1937*—Legislative Committee—Olds Hotel, Lansing—12:00 Noon.
2. *March 3, 1937*—Advisory Committee on Occupational Diseases—Olds Hotel, Lansing—2:00 P. M.
3. *March 9, 1937*—Special Committee on Fee Schedules A, B, C, D, with Finance Committee of State Administrative Board, Lansing—2:30 P. M.
4. *March 17, 1937*—Executive Committee of The Council—City Club, Lansing—3:00 P. M.
5. *March 17, 1937*—Committee on Scientific Work—City Club, Lansing—6:30 P. M.

MINUTES OF MEETING OF LEGISLATIVE COMMITTEE

February 28, 1937

1. *Roll Call.*—The meeting was called to order by Dr. L. G. Christian, Chairman, at 12:35 p. m. in the Olds Hotel, Lansing. Present were: Dr. L. G. Christian, Lansing; Dr. J. B. Bradley, Eaton Rapids; Dr. Wm. E. E. Tyson, Detroit; Dr. P. A. Riley, Jackson; Dr. J. W. Hawkins, Detroit; Dr. Leo Bartemeier, Detroit; Dr. P. R. Urmston, Bay City. Also present were Dr. Henry E. Perry, Newberry, President of the Michigan State Medical Society; Dr. L. Fernald Foster, Bay City; Dr. T. K. Gruber, Eloise; Dr. C. K. Valade, Detroit; Dr. L. M. Snyder, Lansing, and Executive Secretary Wm. J. Burns. Absent: Dr. Wm. A. Hyland, Grand Rapids; Dr. Henry Cook, Flint.

2. *Minutes.*—The minutes of the meeting of February 18 were read and approved.

3. *Basic Science Bill.*—This bill will be introduced early in March (March 4, 1937).

A letter from the Secretary of the Legislation Committee of the Washington State Osteopathic Association, favoring Basic Science, was read.

4. *Relief and Welfare.*—Report was given on meeting of February 24 in Lansing, and Dr. Urmston

gave a report on meeting with the social workers in Detroit on the same day. Mr. Fred Levi is to see Dr. Tuck of Pontiac relative to the Oakland County Plan.

5. *Occupational Diseases.*—A letter from Dr. Earl G. Krieg of the Governor's Study Commission was read. The subject was referred to the Advisory Committee on Occupational Diseases. **PRESIDENT PERRY PLACED DR. EARL G. KRIEG ON THE ADVISORY COMMITTEE ON OCCUPATIONAL DISEASES.**

6. *Legislative Conference of March 10.*—The program of this conference was discussed, and approved.

7. *Medical Examiner Act.*—Dr. Snyder explained the proposed Medical Examiner Act., which may be introduced into the 1937 Legislature.

8. *Adjournment.*—The meeting was adjourned at 3:20 p. m., with the Chairman thanking all for their attendance and good advice.

MINUTES OF MEETING OF PUBLIC RELATIONS COMMITTEE

February 7, 1937

1. *Roll Call.*—The meeting was called to order by Dr. L. Fernald Foster, Chairman, in the East Room of the Hotel Olds, Lansing, at 4:20 p. m. Those present included: Drs. Foster, Bay City; F. T. Andrews, Kalamazoo; C. R. Dengler, Jackson; A. G. Sheets, Eaton Rapids; L. E. Holly, Muskegon; W. S. Reveno, Detroit; F. B. Miner, Flint; A. V. Wenger, Grand Rapids; and Harold Morris, Detroit. Also present were: President Henry E. Perry, Newberry; Drs. Henry Cook, Flint; L. G. Christian, Lansing; P. R. Urmston, Bay City; A. S. Brunk, Detroit; I. W. Greene, Owosso; J. Earl McIntyre, Lansing; L. W. Shaffer, Detroit; A. L. Ziliak, Bay City; L. J. Johnson, Ann Arbor; L. O. Geib, Detroit; H. W. Porter, Jackson; J. S. DeTar, Milan; R. C. Perkins, Bay City, and Dr. W. W. Bauer, Director Bureau of Health and Public Instruction, A.M.A.; and Executive Secretary Wm. J. Burns. Absent: Dr. W. H. Alexander, Iron Mountain.

2. *Minutes.*—The minutes of the meeting of December 6, 1936, were approved as published, motion of Drs. Andrews-Reveno and carried unanimously.

3. *Approval of Medical Service Plan.*—Dr. Cook suggested that physicians who are invited to participate in medical service plans should present same to their county medical societies for approval before accepting same. Dr. W. W. Bauer of the A.M.A. discussed the problem, referring to the A.M.A. House of Delegates resolutions of the 1935 special session, plus the ten points. Dr. Reveno suggested that the item be placed in the Secretary's Letter going to all members of the M.S.M.S., and that same also be incorporated in the Wayne County Medical Society's President's Letter. Motion of Drs. Andrews-Holly that a letter be sent to the County Secretaries publicizing this matter and requesting that, in accordance with the resolutions passed by the American Medical Association in 1935 and with the resolutions adopted by several county medical societies in Michigan, a resolution be passed by all county medical societies to oppose any such plan that might be instituted by any individual or group other than the County Medical Society; and that this subject be made a project of the Public Relations Committee of the M.S.M.S. Motion carried unanimously.

4. *Reports of P.R.C. Members.*—The various members of the P.R.C. gave reports on integration

activities, appearances before county medical societies, and the condition of the Filter System throughout their counties. The Chair urged that each member of the P.R.C. drop in on their county medical societies and give them information on the activities of the State Society at every opportunity.

Dr. Foster explained the importance of integrating the teaching of sex hygiene to school children by physicians, following the Ingham County Medical Society plan, as recommended by the M.S.M.S. House of Delegates at its 1936 session; he also stressed the importance of integrating the Cancer program through all county medical societies, as per the request of the M.S.M.S. Cancer Committee.

Dr. Foster stated that all projects to be integrated by the P.R.C. members will be listed and sent to the members of the committee.

5. *Michigan's Syphilis Control Program.*—This matter was discussed by Dr. L. W. Shaffer, and the committee in general. Dr. Bauer referred to the reprints from the A.M.A. Journal relative to syphilis, and a motion was made by Drs. Andrews-Sheets that a copy of this reprint be sent to each member of the P.R.C. Carried unanimously.

Dr. Shaffer spoke of the need for a manual on syphilis treatment. Motion of Drs. Miner-Holly that it be recommended to the Executive Committee of The Council of the M.S.M.S. that the Syphilis Control Committee be authorized to prepare a manual on the treatment of syphilis. Carried unanimously.

Motion of Drs. Sheets-Miner that the P.R.C. endorse "The Venereal Disease Control Program for Michigan," as attached hereto, and refer same to the Executive Committee of The Council. Carried unanimously. Dr. Perry reported on his contact with Dr. Slemons relative to the venereal disease control program for Michigan, stating that Dr. Slemons was in accord with this plan.

6. *National Campaign of Medical Publicity.*—Upon request, Dr. Bauer discussed the various recommendations relative to a national campaign of medical publicity. The whole matter is now in a formative stage, and must be decided by the House of Delegates of the A.M.A.

7. *Speakers.*—Dr. Foster spoke about procuring medical speakers to address lay groups (through the Joint Committee on Health Education), said medical speakers then being available on the same date to address the county medical society in the evening. County medical societies may procure these speakers by writing the Executive Office of the M.S.M.S., 2020 Olds Tower, Lansing.

8. *Radio Talks.*—The radio talks of the Radio Committee of the M.S.M.S. were approved, on motion of Drs. Wenger-Andrews, and carried unanimously.

9. *Woman's Auxiliary.*—Motion of Drs. Reveno-Dengler that it be recommended that directory of the Woman's Auxiliary be developed, a copy of same to be kept in the Executive Office, said directory listing the positions held by the women in local and state clubs and organizations. Carried unanimously.

10. *Medical Leadership.*—The committee discussed with Dr. Bauer the necessary stimulation of State and county medical societies to action at this critical time, especially in urging physicians to speak before lay groups, and to develop speaking manuals for their use.

11. *Adjournment.*—The meeting was adjourned at 6:35 p. m.

MINUTES OF MEETING OF MATERNAL HEALTH COMMITTEE

February 17, 1937

The luncheon meeting was held in the University Hospital, Ann Arbor. Dr. A. C. Furstenburg, Dean of the Medical School; Dr. Harley Haynes, Director of the University Hospital and Professor Stason of the University of Michigan legal faculty met with the committee. All the members of the committee were in attendance as well as Dr. C. E. Palmer who is conducting the obstetrical survey.

During luncheon the facts relative to the lack of clinical material for teaching purposes in the University Hospital was discussed. The chairman of the committee had been instructed to contact the Dean of the Medical School at the last meeting. Means of rectifying the lack of obstetrical teaching material were suggested and discussed at great length. The committee will present to the Executive Committee of the Michigan State Medical Society suggested plans. All present were agreed that whatever means was taken to rectify this situation should be with the approval of the medical profession of Michigan.

Dr. Palmer reported that delivery charts were not coming in since our last meeting. At the present time 9,500 forms have been returned. The committee feels that 10,000 forms will make a very satisfactory basis for study. Forms received after March 16th will not be included in the study.

Communication was read by Dr. Campbell from the Federation of Women's Clubs of Michigan expressing a willingness to cooperate in any educational program the committee might promote among club members.

A letter was read from the office of Dr. Fred Adair of the Chicago Lying-in Hospital on the definition of Prematurity.

In the absence of Dr. Campbell, Dr. Miller was appointed to act as chairman of the committee.

The question of standardization of methods of reporting still-births to be reported by Dr. Furlong at the next meeting.

Meeting adjourned to meet at the call of Dr. Miller.

HAROLD A. FURLONG, M.D.
Acting Secretary.

MINUTES OF MEETING OF THE EXECUTIVE COMMITTEE OF THE COUNCIL

February 18, 1937

1. *Roll Call.*—The meeting was called to order by Dr. P. R. Urmston, Chairman, at 3:15 p. m. at the Owosso City Club, Owosso, Michigan. Those present included Dr. P. R. Urmston, Bay City; Dr. A. S. Brunk, Detroit; Dr. H. R. Carstens, Detroit; Dr. I. W. Greene, Owosso; Dr. F. E. Reeder, Flint. Also present were Dr. Henry E. Perry, President, M.S.M.S., of Newberry; Dr. L. Fernald Foster, Bay City; Dr. H. H. Cummings, Ann Arbor; Dr. Henry Cook, Flint; Dr. L. G. Christian, Lansing; Dr. James H. Dempster, Detroit; Dr. F. T. Andrews, Kalamazoo, and Executive Secretary Wm. J. Burns. Absent: Dr. T. F. Heavenrich, Pt. Huron (ill).

2. *Minutes.*—The minutes of the Third Session of The Council meeting of January 21, 1937, were read; correction was made in Item 45; and the minutes were approved as corrected, on motion of Drs. Carstens-Reeder. Carried unanimously.

3. *Financial Report.*—The monthly report on the financial status of the Michigan State Medical Society of THE JOURNAL were presented, approved,

and ordered placed on file. Bills payable for the months were presented, and ordered paid, on motion of Drs. Greene-Reeder. Carried unanimously.

4. *Report on Secretaries' Conference.*—Dr. Foster reported on the successful Secretaries' Conference of February 7, 1937. The attendance of ninety-seven physicians included forty county society secretaries. The Council felt that increased activity in the county medical societies throughout the State would result from this important meeting.

5. *Legislative Activity.*—Dr. Perry reported on this matter, and mentioned that the Legislative Committee would meet in Owosso this day, at a later hour.

6. *Syphilis Control Program.*—Secretary Foster presented the Syphilis Control Program for Michigan, as developed by the Committee on Syphilis Control. This plan was approved, on motion of Drs. Carstens-Brunk. Carried unanimously. The program is to be presented to Surgeon-General Thomas Parran, by and with the cooperation of Health Commissioner Slemmons.

It was reported that a representative of Dr. Parran would be sent to Michigan to meet with the Health Commissioner, the Executive Committee of The Council, and other physicians to work out the Michigan Syphilis Control Program. President Perry reported his satisfactory conference with Dr. Slemmons relative to this plan.

Manual on Treatment of Syphilis.—This suggestion, made by Chairman Loren W. Shaffer of the Syphilis Control Committee, was discussed by the Executive Committee of The Council. Motion of Drs. Greene-Brunk that the Syphilis Control Committee either prepare or approve a manual for the M.S.M.S. membership. Carried unanimously.

7. *Schedules A, B, C, and D.*—Reports on activity of the Special Committee on Schedules A, B, C and D were presented, in letters from Dr. E. R. Witwer and Dr. Frank H. Purcell.

8. *Medical Coördinator.*—The report of the Preventive Medicine Committee from the Chairman, Dr. L. O. Geib, was presented. Motion of Drs. Brunk-Carstens that this matter be re-referred to the Preventive Medicine Committee for further study and report back to the Executive Committee of The Council. Carried unanimously.

9. *Michigan Health League.*—The proposal of Dr. R. G. Tuck for formation of a Michigan Health League was explained to the Councilors, and request was made that a copy of same be sent to all members of the Executive Committee.

10. *Admission Policy at U. of M. Hospital.*—Dr. Greene of the Committee Studying Admission Policy at U. of M. Hospital reported. The matter was discussed by Dr. Cummings, who was placed on this special committee. The figures sent by the Hospital to Dr. Penberthy were presented to the Executive Committee, which was asked to submit a report, and thereafter publish its findings in THE JOURNAL.

11. *Postgraduate Activity.*—Dr. Cummings reported on the scope and expense of Postgraduate activities in 1937. Motion of Drs. Carstens-Reeder that the sum of \$300 be taken from committee reserve and added to the Postgraduate Committee's budget. Carried unanimously. Regarding the four lecturers for Alpena, with expenses to be paid from M.S.M.S. funds: Dr. Foster explained that the Joint Committee on Health Education would pay the expenses of medical lecturers who spoke to lay organizations, and that postgraduate meetings in Alpena might be arranged on the evening of the day the lecturer spoke to some lay organization at noon. Dr. Cummings was asked to contact Alpena

with the above in mind, and suggest to the county medical society that it refer all requests for speakers before lay groups, as well as postgraduate lecturers, to Dr. Foster, Secretary.

12. *Approval of Kalamazoo Hospital.*—The Executive Secretary stated that the Crippled Children Commission had approved Borgess Hospital, Kalamazoo, for care of afflicted children, at its February meeting.

13. *Externes for Hospital at Jackson Prison.*—A suggestion from the Preventive Medicine Committee that the M.S.M.S. attempt to supply externes for the hospital of the State Prison of Southern Michigan, Jackson, was presented, by Secretary Foster. Motion of Drs. Carstens-Reeder that the Secretary be requested to contact the Deans of the two Michigan medical schools, recommending approval of the Preventive Medicine Committee's suggestion. Carried unanimously.

14. *Refresher Courses.*—The Executive Secretary reported on his contact with Dr. C. C. Slemmons, relative to further refresher courses, and reported that additional courses would be given this year; also on his contact with the Crippled Children Commission, which has inserted \$1,000 in its budget for said refresher courses this year.

15. *Resolution on Death of Dr. Fred B. Burke.*—This resolution was approved, on motion of Dr. Reeder, seconded by several, and carried unanimously. A copy of said resolution is to be sent to the family of the late Dr. Burke.

16. *Federal Bureau of Health.*—The Executive Secretary reported on the proposed reorganization of the Federal Government, and that the Health Department would be centered in a "Bureau of Social Welfare." Motion of Drs. Carstens-Brunk that resolutions be sent to the three Federal committees, to the Michigan Congressmen and Senators, urging that in any reorganization, a "Bureau of Health" be organized with a qualified physician in charge thereof, and that these important functions be not placed in a "Bureau of Social Welfare." Carried unanimously.

17. *Resolution Re work of the Crippled Children Commission.*—The Legislative Committee recommended approval of the following resolution:

"WHEREAS, the Michigan Crippled Children Commission has administered the Crippled Child Act (Act No. 236 of 1927 as amended) since this law was placed on the statute books, and the Afflicted Child Law (Act No. 234 of 1913 as amended) since 1933; and

"WHEREAS, the programs for the crippled and afflicted children of Michigan have been conducted by the Michigan Crippled Children Commission in a wise and humanitarian manner, in the best interests of the health and welfare of the crippled and afflicted children of this state, and the Crippled Children Commissioners have served voluntarily and conscientiously during this period; therefore be it

"RESOLVED, that the Michigan State Medical Society endorses the recommendations of the Michigan Welfare and Relief Study Commission with regard to these services: that the administration of the work for crippled and afflicted children be continued under the authority of the Michigan Crippled Children Commission."

The Executive Committee of The Council approved the resolution, on motion of Drs. Brunk-Carstens, and instructed that copies of it be transmitted to the Crippled Children Commission and to the Governor of the State of Michigan.

18. *Adjournment.*—The meeting was adjourned at 6:45 p. m., and the Chair thanked all for their attendance and helpful advice.

SOME MEDICAL OR
QUASI-MEDICAL GROUPS

Aero-therapy	Magnetic Massage
Alereos System	Magnetism
Angiopathy	
Astral Healing	Naprapathy
Auto-Hemic Therapy	Naturopathy
Autology	Naturology
Automatic Electronic Ra-	Nervauric Therapeutics
dio Treatment	New Thought
Auto-Science	
Autotherapy	Orificialtherapy
Autothermy	
	Pathiatry
Biochemic System	Patho-Oscillography
Biodynamo-Chromatic	Parkinism
Therapy	Phrenopathy
Biologic Blood-Washing	Pneumatotherapy
Biopneuma	Poropathy
	Practotherapy
Chirothesianism	Prana-Yama
Christos (Blood Washers)	Psychic Sarcology
Chromopathy	
Chromotherapy	Radio Vibratory Diagnosis
Combinathics	Treatment
Coueism	Rawsonism
	Reflectoclasty
Diet Cure	
Divine Science	Sanatology
Dowieism	Sanipractic
	Somnopathy
Eclecticism	Spatial Harmonics
Electro-Homeopathy	Spectrochrome Therapy
Electronaprophotherapy	Spectrochromists
Electronic Therapy	Spiritual Science
Electrono-Chrome Therapy	Spondylotherapy
Emmanuel Movement	
Erosionism	Telatheramy
	Theophonism
Geotherapy	Thompsonism
	Therapeutic Sarcognomy
Herbalism	Tropotherapy
Histolotherapy	
	Vibriotherapy
Iridotherapy	Vita-o-pathy
Kneipp Cure	Zodiatherapy
	Zoism
Leonic Healers	Zonotherapy
Limpio Comerology	

The above list does not include those medical groups which are licensed by the State of Michigan and have boards of registration.

A Wise Investment

Detroit undertakes to eradicate tuberculosis. The Council votes unanimously to appropriate required funds to begin a five-year campaign. That may prove an epoch-making act.

Dr. Henry F. Vaughan, commissioner of health, estimates the cost at a million dollars, but says that the saving when the work is accomplished will be more than \$1,000,000 a year in hospital costs.

A million dollars is a tidy sum and worth saving. And of course, if getting rid of tuberculosis cuts hospital costs \$1,000,000 there will be correlative savings of several times as much that could be estimated pretty accurately in dollars.

But what will it mean to the people of Detroit to be freed from the fear, the dread, the blight that such a disease imposes! What estimate can be put on the lives that will be saved, the homes that no longer will be endangered, the human relationships that no longer will be threatened!

If skill and official service effective in freeing Detroit from tuberculosis is purchasable, any needed investment is justified.—*The Detroit News*.

Where the Lilacs Bloom

It is reported in Los Angeles that lilac bushes grow forty feet high. I don't think we would care to live in a country where they lilac that.—*People's Weekly*.

APRIL, 1937

COUNTY SOCIETIES

CALHOUN COUNTY

WILFRID HAUGHEY, *Secretary*

The March meeting of the Calhoun County Medical Society was called to order at the Athelstan club at 8 p. m. Tuesday, March 2, 1937, by President Brainard.

The minutes of the last meeting were approved as printed in the *Bulletin*.

The secretary read a communication from the state society regarding Basic Science laws, group hospital association laws and the recent meeting of the county secretaries' association, the work of the Public Relations Committee, and the Preventive Medicine Committee.

Dr. Kenneth Lowe reported for the Radio Committee. The programs are being given and will continue to a total of about 18. The radio station say they would be glad to give us the time on account of the nature of the program, but cannot. However, Dr. Lowe suggested a dollar contribution from each one would take care of the whole matter which is a favorable rate when you consider their charge is \$25.00 for 15 minutes. A similar arrangement can be made for next year.

Dr. Geo. W. Slagle was asked to introduce the speaker. Dr. Slagle did so, stating that this research was the result of a grant from Mr. Kettering of General Motors.

Dr. H. Worley Kendell of Miami Valley Hospital, Dayton, Ohio, showed four reels of films, giving the history and development of Heat Therapy, demonstrating treatments and showing patients before and after. This treatment has been found to be of value not only in post-syphilitic disease, but in earlier stages, also in G. C. acute, chronic, rheumatic and ophthalmic. Other Corneal lesions also respond. Sdenhan's Chorea responds beautifully as shown by movies of four patients.

There were also about twenty-five slides. It was an interesting subject—completely covered.

The meeting adjourned. Attendance at dinner, forty-three, at meeting, sixty-two.

EATON COUNTY

THOMAS WILENSKY, M.D., *Secretary*

The Eaton County Medical Society held its regular February meeting at the Carnes Tavern, Charlotte, on the evening of the 25th. Immediately following dinner, the speaker, Dr. C. W. Bradford, Lansing neuro-psychiatrist, was introduced by Dr. L. G. Sevensen.

The "Neuroses and Psychoneuroses" was the subject of Dr. Bradford's informal talk. He traced the developments of psychiatry and the gradual accumulation of information relative to the strange and baffling complaints of those sufferers who are only too casually, oftentimes, labelled neurotics and so disposed of. Dr. Bradford thoroughly discussed the subjects neurasthenia, psychasthenia and hysteria. In addition, he talked briefly about many of the commonly encountered neuroses, phobias and compulsions which enter so intimately into the daily life and habits of most individuals.

Following this enthusiastically received talk, a business meeting was held at which Dr. E. Imthun of Grand Ledge was elected to membership in the

society. The March meeting will be held together with the veterinaries of this and neighboring counties and it is planned to have a speaker who will correlate the two professional branches to the interest and instruction of both.

GENESEE COUNTY

C. W. COLWELL, M.D., *Secretary*

The Genesee County Medical Society met at the Dresden Hotel on January 26, 1937, at 8:30 p. m.

The meeting was called to order by the president, Dr. Alvin Thompson. Minutes of the last meeting were read and approved.

Dr. Probert reported for the Preventive Medicine Committee and asked for volunteers to do the free immunization in schools and stated that those willing to do this work should notify Dr. Olson at once. Dr. Probert also read a proposed recommendation from the Board of Education concerning the routine examination of teachers for next year.

Dr. Brasie spoke briefly for the Medical Economics Committee concerning the plan which they are working on relative to physicians' pay for hospital staff patients.

Dr. Malfroid read his report on the Maternal and Child Welfare Committee and moved that it be adopted. Seconded by Dr. Burnell. After considerable discussion it was moved by Dr. Streat that the motion be tabled. Motion to table was voted on unfavorably after which the original motion was passed.

Dr. Conover read a proposed amendment to the Constitution which is to be published in *The Bulletin* and voted on at a later date.

The names of five applicants for membership were then voted on favorably as members in the Society, which are as follows, Dr. Ralph R. Shaheen, Dr. Samuel S. Gorne, Dr. Gurden S. Guile, Dr. Eugene C. Smith, Dr. Thos. E. Gibson.

The meeting adjourned.

INGHAM COUNTY

R. J. HIMMELBERGER, M.D., *Secretary*

The regular monthly meeting of the Ingham County Medical Society was held at the Hotel Olds, February 16, 1937. Seventy-six members and three guests were at the dinner.

Following the dinner, President Shaw reversed the usual order of business and introduced Dr. Albert M. Snell of the Mayo Clinic, whose subject was "Some Diagnostic Problems in Liver Disease."

After the speaker of the evening had finished his talk, the business meeting was opened.

The minutes of the last meeting were approved as printed in the *Bulletin*.

Dr. Weinburgh read the budget for the year approved by the Finance Committee.

The Public Relations Committee through its chairman, Dr. Snyder, reported that due to the Occupational Disease bill now in the Legislature there was considerable discussion upon the subject at this time and that there was to be a Conference in May in the City of Detroit upon this question. The Conference is to include the surrounding states and it promises to be an outstanding meeting.

The proposed amendments to the by-laws were read as presented to the Society at the last meeting.

Dr. Shaw called for a vote on the amendments

but as there was not a quorum present no vote was taken and the meeting was adjourned.

The regular monthly meeting of the Ingham County Medical Society was held at the Elk's Home on March 16, 1937. A country style chicken dinner was served at 6:30.

Following the dinner the meeting was called to order by the president, Dr. Milton Shaw.

The minutes of the previous meeting were approved as printed in the *Bulletin*. There was no correspondence. The president announced that the Annual Clinic would be held on April 29, at the Hotel Olds.

Dr. Shaw then introduced Dr. Henry E. Perry, president of the Michigan State Medical Society. Dr. Perry, in his short talk, emphasized the importance of writing our Senator and Representatives asking them to give their support on legislative matters, also thanking them for the work they have already done.

Dr. Shaw then introduced "Bill" Burns, executive secretary of the State Society. Mr. Burns suggested our writing personal letters to Mr. Hittle to explain the facts about the Basic Science Bill to him.

Dr. L. G. Christian, chairman of the State Legislative Committee, was called upon; he stated that the Occupational Disease bill and the Welfare and Relief bills were of importance to the medical man. The Occupational Disease bill in its comprehensive form is a menace to medical practice. Dr. Christian thought the bill would be defeated in this form. He also stated that work was being done on the Welfare and Relief bills so that the person concerned would have his own choice of physician, dentist, pharmacist, and undertaker. The social service workers are against these changes, because they are in favor of State Medicine.

Dr. Christian read Representative Brown's editorial on the Basic Science Law, which was very favorable.

The secretary then read the proposed amendments as presented to the Society at the last meeting. Their adoption was moved by Dr. Burhans and seconded by Dr. Meyer.

Dr. L. Snyder stated that he had given the matter some thought and that he wished to make the following revisions in the amendments. His changes when read in whole are as follows:

FINANCE BOARD

The Finance Board shall consist of five persons who have been active members of the Society for not less than seven years. One shall be elected for five years, one for four years, one for three years, one for two years, and one for one year. One member shall thereafter be elected each year for a term of five years. The Board shall annually, after the election, select a chairman.

The Board shall be the custodian of all funds ordinary and extraordinary, belonging to the Society. It shall be responsible for making such investments of funds as to insure a reasonable return to the Society and is authorized to appoint a fiscal agent at reasonable compensation to facilitate the handling of this business.

The Board is responsible for preparing the annual budget and allocating funds to the various departments of the Society.

The Board is responsible for the collection of all funds accruing to the Society. The Finance Board is to pay all bills for administration of the ordinary activities of the Society. Monies are to be disbursed for charitable purposes, advertising or for extraordinary supplies or equipment only with the approval of the Society. The Board shall annually furnish the Society a complete financial accounting of all monies received, monies invested and the profit or loss resulting therefrom and all expenditures ordinary and extraordinary.

THE DUTIES OF THE TREASURER

The treasurer is to be elected for a period of one year and shall have been an active member of the Society for a period of not less than five years. He shall receive such

COUNTY SOCIETIES

compensation as shall be appropriated by the Financial Board with the approval of the Society. He shall be required to furnish a bond in the sum of \$5,000.00, the premium for such bond to be paid by the Society.

The treasurer is to perform such duties as the Financial Board may designate, to keep a report of all monies received and deposited, and to turn over such monies as are in his possession to the fiscal agent, or other parties, as the Financial Board may direct.

Dr. Snyder moved the adoption of these amendments. Dr. Dunn seconded the motion.

After some discussion, Dr. Snyder's amendments were voted upon and passed.

Since the amendments as read by Dr. Snyder were amendments to the original amendments, Dr. Snyder's amendments are in force.

Dr. Shaw then introduced Dr. Stucky, chairman of the Public Health committee. Dr. Stucky in turn introduced Dr. Breakey, who gave a very comprehensive report on findings of the committee from their recent questionnaire which dealt with a survey of the venereal disease situation in the county.

Dr. McIntyre moved that the Preventive Medicine and Public Health Committee's report on Venereal Disease Control be accepted and further study of the subject material be recommended. Seconded by Dr. Hodges. Motion passed.

Dr. Breakey then introduced Dr. Russell Herrold, Assistant Professor of Urology of the University of Illinois and a member of the Executive Committee of the American Neisserian Society.

Dr. Herrold gave a very interesting and educational talk on "The Criterion of Cure as it Pertains to Venereal Infection."

Following Dr. Herrold's talk there was considerable discussion. There being no further business to come before the society, the meeting adjourned.

IONIA-MONTCALM COUNTY

JOHN J. McCANN, M.D., *Secretary-Treasurer*

The February meeting of the Ionia-Montcalm Medical Society was held at the Winter Inn, Greenville, Tuesday evening, February 9, 1937.

One of this hostelry's famous Germanic dinners was served to twenty-two members and guests.

Following the dinner Doctor Bower assumed charge of the scientific program, and introduced Dr. H. C. Robinson, of Grand Rapids, who spoke upon "Allergy, and the Allergic Diseases," giving the history of development of our knowledge of the condition, the very large number of diseases now believed to be allergic.

Specifically, as to asthma, Doctor Robinson enumerated the various measures in alleviation and treatment of the disease. The paper was comprehensive, and discussion was general.

Dr. W. F. Bender then introduced Dr. O. H. McConnell (D.D.S.), who gave a concise and practical talk on "Symptoms Caused by Disturbance of the Function of the Temporo-mandibular Joint." He answered pertinent questions by both physicians and dentists.

Business Meeting: Minutes of the January meeting were read, and approved. Communications from the State Secretary and Committee on Economics were read.

The secretary reported on the meeting of county secretaries of this state held in Lansing, Sunday, February 7, 1937.

Motion was made by Doctor Norris that a member in each town be appointed to act as a press committee to contact local press, with an account of each meeting, and that Secretary send report of each meeting to State Secretary. Carried. The meeting adjourned.

JACKSON COUNTY

HORACE W. PORTER, M.D., *Secretary*

The regular monthly meeting of the Jackson County Medical Society for February, 1937, was held on Tuesday evening, the 16th, at the Hotel Hayes in the main dining room. After the dinner the meeting was called to order by the president, Dr. Crowley. The minutes of the last meeting were approved as published in the *Bulletin*.

The secretary read a letter of appreciation for flowers from Dr. E. H. Corley and relayed a verbal message of appreciation from Dr. Riley. At the time of writing these minutes he is reminded of a similar letter from the Stewart families on a similar matter for the flowers sent on the occasion of the death of the father of M. N. and L. L. which should have been read. A communication from Mrs. Ethel E. Dow was read announcing the opening of a convalescent home on U. S. 12 just east of Chelsea. Announcement of the March meeting of the Highland Park Physicians' Club meeting on March 4 was made together with the general subject of that meeting.

Jackson County showed its intention to cooperate with the M.S.M.S. in its proposed educational plan for doctors of the state by having the first of the speakers suggested by the M.S.M.S. to address the next Mercy Hospital staff meeting on Tuesday, March 2. This speaker is to be supplied by the syphilis subcommittee of the preventive medicine committee and Dr. Crowley, chief of staff, invited the entire medical society to attend this meeting.

The meeting was then adjourned.

LENAWEE COUNTY

E. T. MORDEN, M.D., *Secretary*

The regular monthly meeting of the Society was held February 16, 1937, following a 6:30 p. m. dinner at the Lenawee Hotel, Adrian, with the following members present: Drs. Bland, Chase, Claxton, Hewes, C. H. Heffron, H. H. Heffron, Hornsby, Howland, Lane, Mackenzie, McCue, Miller, Morden, Murawa, Patmos, Peters, Raabe, Rogers, Stafford, Whitney, Wood (21).

President Chase being excused for the time being, Dr. Patmos acting pro tempore, called the meeting to order and the minutes of the previous meeting were read and approved.

President Chase now took the chair and introduced Dr. Chester W. Waggoner, of Toledo, who gave a very comprehensive and interesting address on "Protein Shock Therapy."

Secretary Morden gave a brief account of the State Secretaries meeting at Lansing on February 7.

Dr. H. H. Heffron, chairman of the special committee on methods of care of the indigent sick, reported progress and asked that a special meeting be called for the 19th of February to hear some proposition to be made by the County Manager of the Emergency Relief Administration. The President ordered that such a meeting be called after some discussion in its favor.

There being no further business to come before the Society, the president adjourned the meeting.

MONROE COUNTYFLORENCE AMES, M.D., *Secretary*

A resolution requesting the organization of a Woman's Auxiliary was passed at the meeting of the Monroe County Medical Society on January 21, 1937. President O. E. Parmelee appointed as Advisory Committee to the Auxiliary Doctors S. C. Penzotti, Dundee, and E. C. Long and Florence Ames, Monroe. The committee were very fortunate in securing Mrs. Albert H. Reisig, Monroe, to act as chairman for the ladies during the process of organization. The ladies plan to have their first meeting in March.

Dr. J. Hugh Lewis, of Detroit and Wyandotte, gave a splendid discussion of "Rheumatism in Childhood."

For the February 18 meeting the society tried a new departure and gathered at the Woodland-Dixie Inn, a road house on M56, recently reopened under a new management. The atmosphere of the inn is very informal. Every one had a lot of fun.

Dr. Russell Costello, of Detroit, was our guest and spoke on "Neuritis and Its Treatment." His talk was highly interesting.

Dr. Florence Ames gave a report of the Annual Conference of Secretaries held in Lansing, February 7.

MUSKEGON COUNTYL. E. HOLLY, M.D., *Secretary*

Regular monthly, Scientific Meeting of the Muskegon County Medical Society was held at the Century Club, Friday, January 29, at 6:00 P. M. Following dinner the meeting was called to order by Dr. Colignon, as Dr. Mandeville, the president, was absent because of illness.

The applications for membership of Doctors Meengs, August, and Bowers, having been approved by the Executive Committee, were presented for final action.

Dr. Kerr and Dr. Fleischman were appointed as tellers. The three names were voted upon by ballot. Thirty-five votes were cast, all favorable. Dr. Colignon declared Doctors Meengs, August and Bowers as members of the Muskegon County Medical Society upon payment of their annual dues.

President pro tem Dr. Colignon introduced Dr. German, pathologist at Blodgett Memorial Hospital, Grand Rapids, who talked on "Spain," giving first a short review of the history of this country up to the present time.

Following this brief history, several reels of movies were shown of the life in Spain taken in 1935 and 1936. Many of the buildings have now been completely destroyed.

Dr. German's two summers in Spain were spent with Dr. Ortega at the Cancer Institute in Madrid. After his lecture, he demonstrated many microscopic slides stained by the Ortega method which differentiates types of cell structure by their variation in staining qualities.

The meeting adjourned at 10:00 P. M.

NORTHERN MICHIGANGILBERT B. SALTONSTALL, M.D., *Secretary*

The regular monthly meeting of the Northern Michigan Medical Society was held at the Hotel Perry, Petoskey, Friday, February 12, with President Christie in the chair. Twelve regular members were present and two guests.

The minutes of the December meeting were read and approved. The secretary gave a report of the County Secretaries Conference held February 7 at

Lansing. At the suggestion of the president and secretary the time for meetings was changed from 5:30 P. M. to 6:00 P. M.

The question of reorganization of our now extinct Women's Auxiliary was brought up by Dr. Mayne. Disposition of this matter was left for the March meeting. A motion that the Society continue regular meetings through the summer months was made by Dr. Mayne, seconded by Dr. Saltonstall. Motion carried.

One of our guests, Dr. John Trudeau, was invited to join our Society.

The following committees were appointed by the president:

Medico-legal—Dr. McMillan, Dr. Mayne, Dr. Van Leuven.

Membership—Dr. Christie, Dr. Frank, Dr. Saltonstall.

Program for March—Dr. G. E. Frank.

The meeting adjourned.

ST. CLAIR COUNTYGEORGE M. KESL, M.D., *Secretary-Treasurer*

A regular meeting of this Society was held Tuesday, February 16, 1937, at the Harrington Hotel, Port Huron, Michigan. Preceding the meeting supper was served to eighteen members and four guests. Doctor Howard O. Brush, President, was in the chair when the meeting was called to order. Minutes were dispensed with in order to save time. A letter from the Science Editor of the *Literary Digest*, Mr. Donald G. Cooley, was read, expressing the regret of that publication for its article in the January 30, 1937, issue and promising, "To do our best to make amends in a forthcoming issue." A motion was adopted to hold our first meeting of April with the Macomb County Society at Mount Clemens and hear Dr. William Reveno of Detroit on, "The Medical Management of Hyperthyroidism." Announcement of the next meeting to be held at Port Huron in conjunction with the Seventh District Dental Association on March 2, 1937, was made by the President and the speakers are to be Dr. Ralph Sommer of U. of M. and Dr. A. C. Curtis of the U. of M. An invitation from the Highland Park Physicians Club for their symposium of March 4, 1937, was read. Dr. H. K. Shawan of Detroit spoke on "Tumors of the Breast." After a wholesome discussion the meeting adjourned. Dr. J. W. Webster, resident surgeon of Receiving Hospital, Detroit, was present as a guest of the Society.

INGHAM COUNTY MEDICAL SOCIETY**ANNUAL CLINIC**

Olds Hotel, Lansing

Thursday, April 29, 1937, 1:00 P. M.

FIVE DISTINGUISHED LECTURERS**ORATION FOLLOWING DINNER**

at 6:30 P. M.

All members of the Michigan State Medical Society are cordially invited to attend this one-day clinic.

WOMAN'S AUXILIARY

MRS. A. V. WENGER, *President*, 132 Grand Avenue, N. E., Grand Rapids.
MRS. G. C. HICKS, *President-Elect*, 1009 Wildwood Ave., Jackson.
MRS. CLAIRE L. STRAITH, *Vice President*, 19305 Berkley Drive, Detroit.
MRS. FRANK W. HARTMAN, *Press Chairman*, 7440 La Salle Blvd., Detroit.
MRS. CARL F. SNAPP, *Secretary-Treasurer*, 980 Plymouth Road, S.E., Grand Rapids.

COUNTY AUXILIARIES

Eaton County

The Woman's Auxiliary to the Eaton County Auxiliary held their February meeting in the Dew Drop Inn in Charlotte. Following dinner, which was served at 7 P. M., the members went to the home of Mrs. John Lawther for the business meeting and program. The president, Mrs. Wilevsky, presided; the program was arranged by Mrs. Van Awk and Mrs. Hargrave. Miss Sprange of Olivet gave an interesting review of "Gone With The Wind" by Margaret Mitchell.

Jackson County

The Woman's Auxiliary of the Jackson County Medical Association enjoyed the sixth of a series of winter programs planned by its president, Mrs. Thomas Hackett, and her efficient committee. Taking as keynote the words of Mrs. Robert E. Fitzgerald, the president of the National Auxiliary, as voiced in the 1936 convention, that the Auxiliary meetings should be directed to "the mind, the heart, and the hand," these programs have provided inspiring presentations of matters relating to civic affairs, have stimulated participation in related local projects, and have been enriched by much of beauty in the fields of music and literature.

A buffet dinner in the attractive home of Mrs. R. H. Alter opened the February meeting, after which Mr. Fred Johnson of the Michigan Children's Aid Society, spoke informally of the work of this valuable organization. He told the history of the development of public concern for the child who does not have the support and protection of a normal home, and explained the modern approach to the problem and the reasons for that approach. A lively and most instructive discussion followed the address. The speaker made a distinct contribution to the Auxiliary's knowledge and understanding of this particular civic problem.

The Auxiliary to the Jackson County Medical Society met at Westwood Inn Tuesday evening where dinner was served to thirty-five members.

Dr. Philip E. Riley gave a discussion and explained the proposed Basic Science Law now pending before the state legislature. Reverend Carl S. Winters, pastor of the First Baptist Church, who was introduced by Mrs. G. R. Bullen, gave a book review of James Hilton's "Lost Horizon." His own interesting interpretations of the book added much to the story. Mrs. J. E. Ludwick presided in the absence of the president, Mrs. T. E. Hackett.

The program committee with Mrs. W. E. McGarvey as chairman, made the arrangements for the meeting.

Kalamazoo

The Woman's Auxiliary to the Kalamazoo Academy of Medicine has had several interesting and enjoyable meetings this year under the leadership of the President, Mrs. Clarke B. Fulkerson, and the Program Chairman, Mrs. K. L. Crawford.

Bountiful coöperative dinners have been enjoyed preceding the evening programs.

At the October meeting, held at the home of Mrs. H. A. Rigterink, a most fascinating program was presented by Mrs. C. E. Boys on her hobby of dolls. She told briefly the history of doll making and showed her collection of exquisite native dolls obtained in her travels in foreign lands.

Professor Lemuel F. Smith spoke on his summer in England at a meeting held in November at Mrs. Boys' home.

The Academy of Medicine were hosts at dinner to the ladies at the December meeting held in the Crystal Room of the Columbia Hotel. Dr. William C. Halnon of the National Youth Administration was the speaker of the evening and told of the National Youth Movement with which he is affiliated.

January and February meetings have been given over to informal evenings with no programs planned so that friendship and sociability may be enjoyed.

The March meeting, held at the home of Mrs. Robert Armstrong, featured Mrs. Milton C. Simpson, who presented a book review on "Awav to Cape Breton."

Individual serving trays have been purchased by the Auxiliary to facilitate serving of large groups at the meetings.

The group also continues its interest in the Hard of Hearing School for which a Radio Ear was purchased last year.

Kent County

The meeting of the Women's Auxiliary to the Kent County Medical Society was held in the Medical Arts Club Rooms at 2:30 P. M., Wednesday, January 10. Mrs. Benjamin P. Merrick spoke on "Possible Neutrality for the United States" and her talk was followed by active discussion. Teams captained by Mrs. S. L. Moleski and Mrs. P. S. VanBree served tea with Mrs. W. D. Lyman and Mrs. Reuben Maurits pouring.

On January 20, the Kent County Medical Auxiliary sponsored a benefit bridge and tea party to supply funds for the placement of *Hygiea* magazine in the rural schools of the county. The following members of the Auxiliary opened their homes for bridge: Mrs. Henry J. Pyle, Mrs. Lynn Ferguson, Mrs. Robert H. Denham, Mrs. Henry J. Vandenberg, Mrs. Thomas C. Irwin, Mrs. Reuben Maurits, Mrs. V. N. Wenger, Mrs. A. B. Smith, Mrs. J. B. Whinery, Mrs. Harrison L. Collisi, Mrs. Burton R. Corbus, Mrs. Dewey Heetderks, Mrs. William Torgerson, Mrs. James Brotherhood, Mrs. Don Chandler, and Mrs. Wm. J. Butler. At the conclusion of bridge, tea was served in the home of Mrs. Carl Snapp.

On February 10, the monthly meeting was held in the Medical Arts Club Rooms with Mrs. V. N. Wenger, state president of the organization, as guest speaker. She gave a very interesting talk on the activities and objectives of the State and National Auxiliary.

Our March meeting was of special interest. Dr. Carl N. Snapp, a member of the state legislative

committee, spoke on the proposed Basic Science Law and the importance of this bill being passed.

The Auxiliary were very pleased and delighted to receive an invitation from the Kent County Medical Society to a dinner dance at the Pantlind Hotel, March 13, at which the Medical Society was host. To our surprise the orchestra consisted of doctors. Dr. A. B. Smith, president of the Kent County Society, was orchestra leader and pianist. The other members were trombone, Dr. L. A. Faust; tuba, Dr. J. D. Miller; violin, Dr. Charles Bell; banjo, Drs. A. B. Thompson and M. M. Marrin. The auxiliary felt highly complimented inasmuch as this was the first party tendered to us by our husbands. The party was a huge success and Dr. Smith and his entertainment committee seem to be geniuses at this sort of thing.

On March 20, the *Hygiea* committee had a rummage sale and the proceeds were used to help place this magazine in the public schools.

Wayne County

The Public Relations meeting in March participated in by the Wayne County Auxiliary, included the Ninth Annual Child Health Institute presented by the J. L. Hudson Company, March 8 to 13, in the Hudson Auditorium, March 11 being assigned to the Auxiliary. Dr. Thomas K. Gruber, Pres. W. C. M. S., presided at the morning session and introduced Dr. W. E. Blatz, University of Toronto, who spoke on the "Romance of the Quintuplets." Dr. Blatz substituted for Dr. Allan Roy Dafoe, O.B.E., whose schedule was interrupted by illness. Dr. William E. Blatz, who spoke also at the afternoon session on "The Development of the Quintuplets," was introduced by Mrs. Ledru O. Geib, First Vice President of the Auxiliary.

* * *

The Challenge to Womanhood from the American Society for the Control of Cancer plus Governor Frank Murphy's proclamation of Cancer Week in Michigan, March 21, has spurred women to greater efforts in a war to save human life through education. In this connection the Women's Auxiliary of the W.C.M.S. and the Women's Field Army will present Wm. A. O'Brien, M.D., in the Crystal Ballroom of the Statler hotel, Wednesday, March 24 at 2:15 P. M. "Women's Contribution to the Cancer Problem" will be Dr. O'Brien's subject. The lecture is free and all women are invited to come.

A subscription luncheon honoring Dr. O'Brien will be served at Medical Headquarters, Woodward at Canfield, at 12:15, the same date. It is especially desired that doctors and their wives from neighboring counties will attend this luncheon and lecture.

* * *

The regular monthly meeting of the Auxiliary will be held in the Auditorium of the Detroit Free Press Bldg., Friday, March 19, 2:00 P. M. Miss Aileen Apadford will speak on "Being Your Own Decorator." Mrs. Ralph H. Bookmeyer will receive reservations which are limited to 100 persons.

* * *

Wishes for speedy recovery are being sent to the home of Dr. and Mrs. Roger V. Walker; little Francis Walker is bravely fighting to avoid a mastoid operation.

The young bride was extolling the virtues of her husband to a friend.

"George is just the most generous man in the world," she declared. "He gives me everything credit can buy."—*Pearson's*.

MICHIGAN'S DEPARTMENT OF HEALTH

C. C. SLEMONS, M.D., Dr.P.H., Commissioner
LANSING, MICHIGAN

BIRTHS AND DEATHS INCREASE IN 1936

Michigan temporarily set aside in 1936 the statistician's fear of a stationary population, for provisional statistics for that year indicate the highest birth rate in five years. An increase of 1,054 births was recorded last year when the natural population growth of most other states was declining. A total of 88,457 births gave this state a rate of 17.41 births per 1,000 population, the highest since 1931. A one per cent increase was indicated over the 1935 rate of 17.21 when 87,403 births were reported.

This increase gave Michigan an excess of 33,680 births over deaths despite the highest death rate recorded here in seven years. Provisional figures show that 3,726 more persons died last year than in 1935. A total of 54,777 deaths was reported with a rate of 10.78 deaths per 1,000 population, the highest since 1929. The 1936 rate is a seven per cent increase over the 1935 rate of 10.05 when 51,051 deaths were reported. This increase is typical of the general six per cent mortality rise experienced throughout the nation last year.

Deaths of infants under one year of age also increased in 1936, 4,490 deaths being recorded, compared with 4,170 in 1935. The infant mortality rate of 50.76 deaths per 1,000 live births is an increase of 6.4 per cent over 1935 rates. Rates for 1936 are estimated on the basis of a population of 5,080,000 for Michigan.

* * *

DATA ASKED ON PREVAILING OCCUPATIONAL DISEASES

To determine the prevailing occupational diseases in Michigan, the Bureau of Industrial Hygiene has sent a questionnaire to 4,943 physicians throughout the state requesting data on types of cases treated since March 1, 1936. Of the total number of questionnaires, 2,361 were sent to physicians in Detroit and 2,582 to outstate physicians.

The response to this request has been favorable thus far, and reports are coming in daily. The final compilation of this data will be of tremendous value in directing the efforts of this bureau toward the prevention of occupational hazards to health and will aid in the administration of contemplated occupational disease legislation proposed for this session of the State Legislature.

Statutes require the reporting of cases of poisoning by lead, phosphorous, arsenic, or mercury, or of anthrax or compressed air illness. This survey, however, covers reports of all cases resulting from dust; from any poison, whether solid, liquid, gas or vapor; any dermatoses or illnesses resulting from excessive temperature; humidity, posture strain or other affliction related to the patient's occupation.

* * *

COUNTY AND DISTRICT HEALTH OFFICERS

Dr. Clifton E. Merritt, Coldwater physician who completed the health officers' training course at the University of Michigan, has been appointed director of the recently organized Dickinson County Health Department. Dr. Merritt's headquarters will be at Iron Mountain.

Dr. L. H. Gaston, who has been directing local health activities in Health District No. 7, including

Clare, Gladwin and Arenac counties, has been selected to direct the new Sanilac County Health Department, the first health unit to be organized in the Thumb District. Headquarters will be at Sandusky.

Dr. D. A. Vander Slice, son of Lansing's health officer, Dr. E. R. Vander Slice, and a recent graduate of the University health officers' training course, will assume Dr. Gaston's work in District No. 7 with headquarters at Gladwin. No director has yet been appointed to head the new Bay County Health Department.

Michigan ranks today with the more progressive states in providing modern health protection for rural areas similar to that existing in the larger cities. Only 30 of Michigan's 83 counties do not yet have full time, trained health officers providing this service.

* * *

DENTAL HYGIENE PROGRAMS

Extensive dental health promotion programs are being carried on in the schools of Ingham and Muskegon counties under the supervision of Dr. William R. Davis, director, Bureau of Mouth Hygiene. Purpose of the program is to aid teachers in the promotion of dental hygiene instruction in the classroom. Pupils and parents are also instructed in the importance of adequate diet, early and periodic dental care, and mouth cleanliness in the development of healthy teeth.

Local dental societies are participating in the programs with free dental examinations for elementary school pupils accompanied by parents. The Lansing Department of Health and the Lansing Board of Education are sponsoring the program in all of the elementary schools of that city.

More extensive dental programs similar to these are being planned in cooperation with local dental societies throughout the state. Dr. Floyd DeCamp, dentist, and Miss Ruth Rogers, dental hygienist, are assisting Dr. Davis with the local programs.

* * *

BUREAU OF ENGINEERING

Algonac has voted an additional bond issue of \$18,000 to finance the new filtration plant which is now under construction, according to a report from the Bureau of Engineering.

C. T. Mudgett, assistant engineer in charge of operation of sewage treatment plants for the Michigan Department of Health, has accepted a position in charge of the sewage treatment plant recently completed at Muskegon.

Revised bulletins of the Bureau of Engineering now ready for distribution upon request include the following: No. 5—The Chemical Closet; No. 13—Mosquito Control; and No. 19—Well Water Supplies for Municipalities.

* * *

MIDWEST CONFERENCE ON OCCUPATIONAL DISEASE

The Michigan Department of Health is collaborating with the Michigan State Medical Society, Detroit Department of Health, Wayne County Medical Society and Engineering Society of Detroit in the plans for the Midwest Conference on Occupational Diseases which will be held May 3 to 7 at the Statler Hotel in Detroit in conjunction with the annual meetings of the Michigan and American Associations of Industrial Physicians and Surgeons.

General chairmen of the conference include Henry Cook, M.D., Gordon C. Harrold, Ph.D., Carey P. McCord, M.D., Clyde C. Slemons, M.D., and Henry F. Vaughan, Dr.P.H. Interested members of the health and engineering professions are invited to attend the occupational disease conference,

the scope of which will include extensive practical discussions of the dusty lung diseases, tuberculosis in industry, industrial skin diseases, the engineering control of industrial exposures, the making of industrial hygiene surveys, air conditioning, and compensation for occupational diseases. No registration fee is anticipated for attendance at the conference. Dr. McCord, director, Bureau of Industrial Hygiene, Detroit Department of Health, is acting as executive co-chairman in charge of arrangements.

* * *

AUTOMOBILE DEATHS IN 1936

Automobiles killed 1,891 persons in Michigan in 1936 to set an all-time high toll for this cause of death, according to reports compiled by the Bureau of Records and Statistics.

The 1936 automobile deaths are thirteen per cent higher than the total of 1,667 deaths reported in 1935, the previous high record. The highest number of automobile deaths in any single month occurred in December when 223 persons were killed. More than 200 persons were killed during each of the last four months of the year, an average of at least seven deaths per day.

* * *

TYPHOID CARRIER CONTROL

The carrier problem, the most important one in the eradication of residual typhoid fever, is receiving intensive consideration by the Bureau of Communicable Diseases. At present every case of typhoid fever reported to the department is investigated by a representative of either the state or local health departments and followed up to ensure that no new carriers escape detection.

Thirty-three carriers, each a potential source of wide-spread outbreaks of typhoid fever, were discovered and instructed in prevention during the past year. A total of 200 carriers are now registered by the department, but it is estimated that probably 1,500 remain undiscovered, the greatest menace being the foodhandler who, unknowingly, is a carrier of typhoid fever.

* * *

MAY DAY—CHILD HEALTH DAY 1937

In accordance with the Congressional Resolution of May 18, 1928, Saturday, May 1, 1937, will be known as May Day—Child Health Day in Michigan. National and state proclamations are expected to add to the attention devoted to local programs commemorating the purpose of the day, "Health Protection for Every Child."

School groups, parent-teacher organizations, and other community educational and health agencies are sponsoring programs to promote "the extension of year-round child-health services in every community, including services for physically handicapped children."

Miss Marjorie Delavan, director, Bureau of Education, Michigan Department of Health, has been appointed as chairman of May Day—Child Health Day in Michigan. Observances by community groups may take the form of an evaluation of child health services in the community based on a survey of existing child health conditions and organizations to promote child health; the launching of new local child health projects, possibly the beginning of the annual summer preschool round-up; and exhibits or programs celebrating gains made. Projects for children are suggested as a climax for the year's health program—festivals, athletic meets, programs, exhibits celebrating children's growth, vigor and safety from health hazards.

IN MEMORIAM

Dr. Joseph Cooperstein

Dr. Joseph Cooperstein of Flint is dead. He was born in Russia on October 12, 1882, and came to the United States in 1900 with little else but a determination to make good. He graduated from the College of Physicians and Surgeons, University of Illinois, and interned in the Jewish Consumptive Hospital in Denver. He was married in 1916 to Sally Branson. In 1918, he established his home and office in Flint, for the general practice of medicine. Dr. Cooperstein was well posted on not only medical subjects, but on subjects in various other fields. He was a linguist of great ability, he spoke seven languages, Hebrew, German, Russian, Yiddish, Italian, Aramaic and English. He was an active member of the Genesee County Medical Society since the time of his arrival in Flint. He is survived by his wife, a son David, and two daughters, Mitzi and Judith, his father, who is living in Russia, a half-sister in Palestine, and a half-brother in Detroit.

Dr. William G. Kelly

Dr. William G. Kelly of Bay City died at his home on February 17, 1937. He was born in Kingston, Ontario, in 1874, and was graduated from the medical department of Queen's University, Kingston, in 1897. Following his graduation, he located in Bay City, where he was in practice up to the time of his last illness. In 1900 he married Miss Ethel Landeryou. Dr. Kelly was Bay County Coroner from 1909 to 1913. He was past president of the Bay County Medical Society. He is survived by his widow, one son, Howard, who lives in Bay City, and one brother, Jack, in California.

Dr. John H. Kimble

Dr. John H. Kimble of Plymouth, Michigan, died after a brief illness in February. He was born in Manchester, Ohio, in 1867. He had practiced for over forty-five years. He graduated from the University of Michigan in 1891 with the degrees of Ph.D. and M.D. During the World War, Dr. Kimble enlisted for military service and was stationed at Camp Brady. He is survived by his widow. He was a member of the Wayne County Medical Society, Michigan State and American Medical Associations.

Dr. William T. Morrison

Dr. William T. Morrison of Pigeon died at his home on February 21, 1937, after a year's illness. Dr. Morrison was born in Lambton County, Ontario, seventy-one years ago. He received his early education at Strathroy High School and studied at the Bellevue Hospital in New York City where he graduated as a nurse in 1892. He attended and received the degree of M.D. from the Detroit College of Medicine in 1896. Dr. Morrison first practiced at New Haven, later moving to Bayport and Midland. He located at Pigeon in 1905 where he practiced until 1918. Following this, he practiced nine years at Albion, returning to Pigeon in 1927 where he practiced until his death. He was married a second time in 1929 to Miss Jean Duncanson of Harbor Beach. He leaves his widow and two daughters by his former marriage.

Dr. George E. Potter

Dr. George E. Potter of Detroit died March 16, 1937, after an illness of eight days. Dr. Potter was born in Essex, Ontario, sixty-three years ago. He was graduated from the Detroit College of Medicine in 1896. Following a year's internship at St. Mary's Hospital; he entered upon the practice of surgery. He was a member of the American College of Surgeons, The Detroit Academy of Surgery, the Wayne County, Michigan State and the American Medical Associations. He is survived by his wife, Carrie B. Potter, four brothers, Drs. Andrew D., Willis, and Lewis, and Mr. Fred Potter, and two sisters, Mrs. William Hyland and Mrs. Fred Whitman.

Dr. James T. Redwine

Dr. James T. Redwine, superintendent of the Michigan Farm Colony for Epileptics at Wah-jamega since 1934, died at the University Hospital, Ann Arbor, March 16, 1937. The cause of death was heart disease. He was born at Supply, Arkansas, sixty-one years ago. From 1918 to 1923, Dr. Redwine was Superintendent of the State Hospital at Newberry. He was graduated from the College of Physicians and Surgeons, St. Louis. He is survived by his wife, Anna, and one son, Jack, a student at the University of Michigan. He was at one time president of the Tuscola County Medical Society.

Dr. Edward A. Schilz

Dr. Edward A. Schilz, member of the State Council of Health, died suddenly Monday afternoon, February 1, 1937, at his home in Grand Ledge where he had carried on his medical practice since 1899.

Born in Norfolk County, Ontario, March 23, 1872, Dr. Schilz was educated in the Canadian schools and later received his medical degree from the Detroit College of Medicine. After two years of practice at Delta Mills, he came to Grand Ledge in 1899 where he has since served as friend and medical advisor to hundreds of townspeople who mourn his loss. During the World War, Dr. Schilz rendered distinguished service as a captain in the United States Army Medical Corps.

Dr. Schilz's death came as a shock to members of the health professions of Michigan whom he had served in an advisory capacity on the State Council of Health since his appointment by Governor Fitzgerald on May 27, 1935. Four decades of conscientious service in the practice of his profession gave Dr. Schilz a broad understanding and faith in the ultimate objectives of public health. With unassuming dignity he performed well the official duties placed upon him and thereby won the lasting respect of his fellow workers.

Renal Insufficiency Developing During Prolonged Use of Alkalis

J. Murray Steele, New York (*Journal A.M.A.*, June 13, 1936), reports a case in which the use of alkali through a span of many years for the relief of pain due to a duodenal ulcer was followed eventually by the passage of albumin, red blood cells and casts in the urine, and the appearance of severe renal insufficiency, as indicated by elevation of the urea nitrogen of the blood and marked decrease in the ability of the kidneys to excrete urea and to concentrate the urine. Recovery followed discontinuance of the use of alkalis. The usual neurologic manifestations of alkalosis—nausea, headache, nervousness and tetany—were absent. Fatigue and nocturia were the only complaints.

General News and Announcements

The One Hundred Per Cent Club of the Michigan State Medical Society:

1. Clinton County Medical Society
2. Eaton County Medical Society
3. Luce County Medical Society
4. Manistee County Medical Society
5. Muskegon County Medical Society
6. Newago County Medical Society
7. Oceana County Medical Society
8. Ontonagon County Medical Society
9. Schoolcraft County Medical Society
10. Tuscola County Medical Society

The above County Medical Societies have paid dues in full for each and every member of the County and State Medical Society. A number of other County Societies lack but a few, sometimes only one or two, of being One Hundred Per Cent. Have YOU paid your dues?

Dr. Abraham Bloch of Detroit lost his father with pneumonia, also a brother, during the first week in March.

Definition of good-will: "The disposition of a pleased customer to return to the place where he has been well treated." From the United States Supreme Court.

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Dr. Cameron Haight, of Ann Arbor, led a discussion on "Chest Problems" at the March meeting of the Livingston County Medical Society held in Howell, March 5, 1937.

* * *

Dr. Perry Robertson of Ionia spoke to the Ionia-Montcalm County Medical Society on "Mental Hygiene," on March 9, 1937. The meeting was held at the Hotel Belding, Belding, Michigan.

* * *

Dr. Henry Cook, of Flint, president-elect of the Michigan State Medical Society, spoke to the Optimists' Club of Flint on February 26. His subject was "Socialized Medicine."

* * *

Professor W. H. Hobbs, professor emeritus of Geology of the University of Michigan, gave an illustrated lecture before the Wayne County Medical Society March 8.

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The Journal of the American Medical Association for March 6, 1937 (Vol. 108, No. 10), contains six articles on venereal disease with emphasis on clinical problems of syphilis and its control.

* * *

Dr. Don M. Morrill, formerly superintendent of Blodgett Hospital, Grand Rapids, assumed his new duties as superintendent of Receiving Hospital, Detroit, on March 15.

* * *

September 27, 28, 29, 30, 1937, are the dates for the 72nd Annual Convention of the Michigan State Medical Society. Plan now to attend this Convention in Grand Rapids, the Furniture Capital of America. Have you sent in your hotel reservation?

The A. M. A. will hold its annual meeting in Atlantic City the week of June 6, 1937.

The American Medical Golfing Association will hold its 23rd annual tournament at Seaview, Atlantic City, N. J., on Monday, June 7, 1937.

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Dr. Henry A. Luce of Detroit, Chairman of the Mental Hygiene Committee of the Michigan State Medical Society, spoke on "Mental Hygiene" to the physicians of Jackson at the Foote Hospital, Jackson, on Tuesday, March 9, 1937.

* * *

The Annual Meeting of the Upper Peninsula Medical Society will be held in Houghton, Michigan, on August 19 and 20. Many prominent speakers are scheduled for the program of this meeting. Upper Peninsula physicians are asked to bear the date in mind when planning their summer activities.

* * *

Dr. Donald M. Morrill of Grand Rapids has been appointed superintendent of the Receiving Hospital, Detroit. Dr. Morrill has been superintendent of the Blodgett Memorial Hospital, Grand Rapids, for thirteen years. He was graduated from the University of Michigan Medical School in 1918.

* * *

Dr. A. M. Wehenkel of Detroit has purchased Paton Hall in Romeo, Michigan, once an exclusive boarding school for girls, to open it in April as a tuberculosis sanitarium. The Wehenkel Sanitarium in Farmington will be closed and the patients will be transferred to the new sanitarium at Romeo.

* * *

"**State Society Night**" will be marked by the Kalamazoo County Medical Society on May 27, 1937, at the Kalamazoo Country Club, Kalamazoo. The Lenawee County Medical Society will hold its "State Society Night" on June 15th. Dinner will be held at the Lenawee Hotel in Adrian at 6:30 P. M.

* * *

The Public Relations Bureau of the Medical Society of the State of New York sent out a questionnaire to its membership asking these questions. (1) If you had a son would you want him to select medicine as a career? (2) How old were you (approximately) when you determined to be a doctor? (3) What decided you? (Please explain the incident, influence or reason which resulted in fixing your ambition.)

* * *

The third annual meeting of the American Neisserian Medical Society will be held on June 8, 1937, in the Senator, Atlantic City. The program will consist of papers and discussions of the various phases of the management and control of gonorrhea. All who are interested are cordially invited to be present. The meeting will begin promptly at 10:00 A. M. and will continue through the day.

* * *

You have only a few more days to pay your dues to your county medical society in order that your name may be included in the "Directory Number" of THE JOURNAL of the Michigan State Medical Society. Rush your check to the County Secretary now and be sure you are certified to the State Society before April 15 so your name will be included in the list of members in good standing.

Hurry, hurry, hurry! The limited supply of the Medical History of Michigan is going fast at the new reduced price of \$3.00. Have you secured your copy of this valuable historical account of Medicine in Michigan? It will be impossible to secure this set after the present supply is exhausted. Order now through 2020 Olds Tower, Lansing. The price is \$3.00 for the two volumes.

* * *

Saturday, May 1, will be observed as Child-Health Day throughout the United States. The object is the protection of the health of every child. A May Day chairman will be appointed by the state health officer. Programs will be in the nature of (1) an evaluation of child-health services in the community based on a survey of existing child health conditions and organization to promote child health, (2) the launching of new local child-health projects, and (3) exhibits or programs celebrating gains made.

* * *

A very complete and informative article by John H. Stokes, M.D., entitled "Combatting Early Syphilis," appeared in the *Reader's Digest* for March, 1937, Vol. 30, No. 179, p. 9. Dr. Stokes is a member of the faculty of the University of Pennsylvania. This is evidence of the effort of lay magazines to aid in the nation-wide campaign to reduce the scourge of syphilis. The *Reader's Digest*, Pleasantville, New York, will provide reprints of Dr. Stokes' article on "Combatting Early Syphilis" at a dollar in lots of one hundred or more.

* * *

The report of the American Foundation Studies in Government will be issued soon. This Foundation made a nation-wide survey, consulting competent medical opinion throughout the country, on the conditions of medical practice—what changes the current era warrants adopting for the delivery of medical care to the American People, and what form such changes, if any, should take.

Our opportunity is now. Study the report; it was written by your colleagues. Then let us act. Informed public opinion expects no less than that of us.

* * *

Beware of man posing as a clinical pathologist who visits physicians and asks them to endorse checks to pay for repairs to his automobile. This man has been reported working this racket in Detroit. He is about 5 feet 9 inches tall; dark brown wavy, wiry hair, a high forehead, dark skin, large brown eyes; thick skin with deep wrinkles; teeth excellent and very white; and weight about 170 lbs. Superintendent of the Pennsylvania State Police, Lynn G. Adams, sent out a warning to all states to be on the lookout for this imposter.

* * *

'Crippled and Afflicted Child Commitments For February 1937:

Crippled Child: Total of 148.

Of the total number 59 went to the University Hospital and 89 went to miscellaneous hospitals.

From Wayne County (included in above totals): Total cases 37.

Of the 37 cases in Wayne County, 1 went to University Hospital and 36 to local hospitals.

Afflicted Child: Total of 1047.

Of the total number 202 went to University Hospital and 845 went to miscellaneous hospitals.

From Wayne County (included in above totals): Total cases 224.

Of the 224 cases in Wayne County, 19 went to University Hospital and 205 went to miscellaneous hospitals.

A few more of your friends who entered technical exhibits at the Detroit Convention of the State Society, held in September, 1936, included:

W. B. Saunders Company, Philadelphia, Pa.
Scientific Sugars Company, Indianapolis, Ind.
S.M.A. Corporation, Cleveland, Ohio.
Sonotone Detroit Company, Detroit, Mich.
Standard X-Ray Equipment Company, Detroit, Mich.
Frederick Stearns & Company, Detroit, Mich.
Taylor Instrument Company, Rochester, N. Y.
Treatment Regulator Corp., Detroit, Mich.
James Vernor Company, Detroit, Mich.
Wall Chemical Company, Detroit, Mich.
Western Electric Hearing Aid, Detroit, Mich.

* * *

Physicians came from all parts of the state on March 10 to attend a Conference held at the Hotel Olds, Lansing. The meeting was addressed by Dr. Henry E. Perry, Newberry, president; by Dr. Henry Cook, Flint, president-elect; by Dr. L. G. Christian, Lansing, chairman of the Legislative Committee of the State Society, and by Dr. J. B. Bradley of Eaton Rapids.

The attendance by counties follows:

Bay: Dr. L. Fernald Foster, Dr. P. R. Urmston, Bay City. *Branch:* Dr. A. E. Brunson, Dr. J. A. Thomas, Coldwater. *Calhoun:* Dr. Wilfrid Haughey, Dr. Wm. M. Dugan, Battle Creek. *Cass:* Dr. U. M. Adams, Marcellus. *Chippewa-Mackinac:* Dr. F. J. Moloney, Sault Ste. Marie. *Eaton:* Dr. J. B. Bradley, Dr. A. G. Sheets, Eaton Rapids; Dr. V. J. Rickerd, Charlotte. *Genesee:* Dr. Henry Cook, Flint. *Gratiot-Isabella-Claire:* Dr. L. J. Burch, Mt. Pleasant. *Ingham:* Dr. L. G. Christian, Dr. R. J. Himmelberger, Dr. H. A. Miller, Dr. Milton Shaw, Lansing. *Jackson:* Dr. Horace Wray Porter, Dr. John D. VanSchoick, Jackson. *Kalamazoo:* Dr. F. T. Andrews, Dr. C. L. Bennett, Kalamazoo. *Luce:* Dr. Henry E. Perry, president, Newberry. *St. Clair:* Dr. H. O. Brush, Dr. T. F. Heavenrich, Dr. George Waters, Port Huron. *Shiawassee:* Dr. I. W. Greene, Owosso. *Wayne:* Dr. A. L. Brooks, Dr. J. W. Hawkins, Dr. Wm. E. E. Tyson, Detroit. Executive Secretary Wm. J. Burns.

The following guests were also present: Mrs. A. V. Wenger, president, Woman's Auxiliary, M.S.-M.S., and Mrs. Wm. J. Butler, Grand Rapids; Mrs. P. R. Urmston, and Mrs. A. L. Ziliak of Bay City; Mrs. L. G. Christian, Lansing; Mrs. A. L. Brooks, Detroit; and Mr. Larry C. Salter of the *Detroit Free Press*, Detroit.

* * *

Social Security Taxes Now Being Paid

The Federal tax returns required by Title VIII of the Social Security Act are now being filed at a satisfactory rate in the offices of the sixty-four Collectors of Internal Revenue, Commissioner of Internal Revenue Guy T. Helvering announced today. The Commissioner calls attention to the fact, however, that some misunderstanding evidently exists on the part of many taxpayers as to the place to which the returns should be sent and the payments made.

Each employer should file his return on form SS-1 with the Collector of Internal Revenue for the district in which is located his principal place of business. If the employer has no principal place of business in the United States he should file his return with the Collector of Internal Revenue, Baltimore, Maryland. The tax must be paid at the time the return is filed. Checks, drafts or money orders in payment of these taxes should be made payable to the Collector of Internal Revenue.

Title VIII of the Social Security Act, approved August 14, 1935, imposes an excise tax upon employers and an income tax upon their employees

measured by the amount of wages paid on and after January 1, 1937, with respect to employment on and after that date. The rate of each tax for the years 1937, 1938 and 1939 is one per cent of the wages paid. The law provides that the employer shall collect the employee's tax by deducting the amount of such tax from the wages as and when paid. The returns now being filed on Internal Revenue Form SS-1 cover the month of January, 1937. Every employer who, during any calendar month beginning after December 31, 1936, employs one or more individuals in a business not specifically exempt from the tax, is required to make a return on Form SS-1. The returns for the month of January, 1937, must be filed not later than the end of February.

The taxes imposed by Title VIII of the Social Security Act have created a new class of Federal taxpayers, many thousands of whom have heretofore had no occasion to send tax returns and payments to the various Internal Revenue Collectors. This no doubt accounts for the fact that some misunderstanding exists on the part of a portion of these taxpayers in regard to meeting their obligations to the Government under the Social Security Act. Some of the returns and moneys are being sent to the Social Security Board at Washington and some of the taxpayers are making their returns to the various field offices of the Social Security Board, while still others have sent their returns and remittances to the Bureau of Internal Revenue at Washington. The Bureau of Internal Revenue states that every possible effort is being made to refer the returns and moneys promptly to the appropriate Collectors of Internal Revenue where the moneys will be deposited in the designated depository banks and the returns listed for assessment. It is expected that before the end of the month more than two million returns will have been received in the sixty-four Collector's offices.

Prior to the effective date of the taxes, the sixty-four Collectors of Internal Revenue located throughout the United States compiled lists of the persons and firms apparently subject to the tax and distributed blank returns to them. All possible efforts were made to place a blank in the possession of every potential taxpayer. However, it was explained by the Bureau of Internal Revenue that failure to receive a blank return form did not excuse a taxpayer for failure to file his return and pay the tax on time. Any person liable for the tax who failed to receive a form may secure a blank by making a request upon the Collector of Internal Revenue for his district. The law provides penalties both for delinquency in filing the return and for failure to pay within the required time.

* * *

NORTHERN TRI-STATE MEDICAL SOCIETY

The sixty-fourth annual meeting of the Northern Tri-State Medical Society will be held in the Hayes Hotel, Jackson, Michigan, on Tuesday, April 13, 1937. Dr. W. H. Marshall of Flint, Michigan, president of the Society, will preside. The program is as follows:

Morning Session

Dr. Ernest E. Irons, Professor of Medicine, Rush Medical College, Chicago, Illinois.

"Treatment of Chronic Arthritis"

Dr. Edward A. Oliver, Clinical Professor of Dermatology, Rush Medical College, Chicago, Illinois

"Dermatological Problems Encountered in General Practice"

Dr. William Cubbins, Assistant Professor of Surgery, Northwestern University Medical School, Chicago, Illinois.

"Compound Fractures and Their Complications"

Dr. E. N. Collins, Crile Clinic, Cleveland, Ohio

"Disease of the Colon"

Dr. Ray Grinker, Professor of Neurology, Chicago University, Chicago, Illinois

"The Epilepsies"

Dr. Roscoe R. Graham, Professor of Surgery, University of Toronto, Toronto, Canada

"Present Status of Gall-bladder Surgery"

LUNCHEON

Afternoon Session

Dr. Elmer L. Severinghaus, Assistant Professor of Medicine, University of Wisconsin, Madison, Wisconsin

"Current Endocrine Problems in Gynecology"

Dr. John S. Lundy and Dr. Edward B. Tuohy, Mayo Clinic, Rochester, Minnesota

"Various Anesthetic Agents—Especially Some of the Newer Preparations"

Dr. George M. Curtis, Professor of Surgery, Ohio State University, Columbus, Ohio

"Intrathoracic Goiter"

Dr. Henry O. Mertz, Professor Genito-Urinary Surgery, Indiana University, Indianapolis, Indiana

"Urinary Tract Symptoms as They Influence Differential Diagnosis of Abdominal Disease"

Dr. William P. Tew, F.R.C.S., Professor of Obstetrics, University of Western Ontario Medical School, London, Canada

"Conservative versus Radical Obstetrics and Gynecology"

Dr. Allan J. Hruby, Secretary Municipal Tuberculosis Sanitarium, Chicago, Ill.

"Value of a Collapse Therapy Program in the Control of Pulmonary Tuberculosis"

Annual Dinner—The Hayes Hotel

Address of Welcome—Dr. E. D. Crowley, President Jackson County Medical Society, Jackson, Michigan

Dr. Phillip Kreuscher, Assistant Professor of Surgery, Northwestern University, Chicago, Illinois

"Backache"

* * *

OCCUPATIONAL DISEASE CONFERENCE*

The Midwest Conference on Occupational Diseases will convene in Detroit, May 3, 4 and 5, and the American Association of Industrial Physicians and Surgeons will follow on May 6 and 7. All sessions except those for Wednesday, May 5, will be held in the Statler Hotel Ballroom. Sessions for Wednesday, May 5, will be held at the Detroit Art Institute. The program of the Midwest Conference on Occupational Diseases is as follows:

Monday, May 3.—Registration, Morning session, 9:00 A.M., Statler Hotel Ballroom; Industry and Industrial Diseases, presiding, Dr. Clarence D. Selby, Medical Consultant, General Motors Corporation, Detroit; "The Midwest Conference on Occupational Diseases," Introductory Address, Dr. Henry F. Vaughan, Commissioner, Department of Health, Detroit; Welcoming Address, Dr. Thomas K. Gruber, President, Wayne County Medical Society, De-

*The programs of the conference on Occupational Disease and that of the Industrial Physicians and Surgeons are given in full. In view of pending legislation on Occupational Disease, the program put on at these conferences should interest every practicing physician in the state, whether he be directly associated with industry or not. A cordial invitation is extended to all members of the Michigan State Medical Society to attend these conferences.

troit; "Industry as a Source of Disease," Dr. Emery R. Hayhurst, Consulting Industrial Hygienist, Columbus, Ohio; "The Worker as Affected by Industrial Exposures," Dr. William D. McNally, Associate Professor Materia-Medica and Toxicology, Rush Medical College, Chicago, Illinois.

Afternoon Session—2:00 P. M., Statler Hotel Ballroom; Pulmonary Diseases in Industry; presiding, Dr. Bruce Douglas, Tuberculosis Controller, Department of Health, Detroit; "Industrial Factors in Tuberculosis," Dr. A. J. Lanza, Assistant Medical Director, Metropolitan Life Insurance Company, New York City; "Industrial Tuberculosis," Dr. Andrew R. Riddell, Division of Industrial Hygiene, Ontario Department of Health, Toronto, Ontario; "The Surgical Treatment of Tuberculosis with Special Reference to Shortened Disability Periods for the Industrial Worker," Dr. E. J. O'Brien, Surgical Director, Herman Kiefer Hospital, Detroit.

Tuesday, May 4.—Registration, Morning session, 9:00 A. M., Statler Hotel Ballroom; Industrial Hygiene Engineering Methods, Appraisal of Exposures—Part I, presiding, Mr. John M. Hepler, Director, Bureau of Industrial Hygiene, Michigan Department of Health, Lansing; "The Industrial Hygiene Survey," Dr. Carey P. McCord, Director, Bureau of Industrial Hygiene, Department of Health, Detroit; "Industrial Hygiene Laboratories and Their Work," (Demonstration of Laboratory Equipment and Procedures), Dr. William G. Fredrick, Assistant Chemical Engineer, Bureau of Industrial Hygiene, Department of Health, Detroit, and Dr. Gordon C. Harrold, Industrial Hygiene Laboratory, Chrysler Corporation, Detroit.

Afternoon session—2:00 P. M., Statler Hotel Ballroom; Control of Exposures—Part 2, Presiding, Professor H. E. Miller, Professor of Public Health Engineering, University of Michigan, Ann Arbor; "Engineering Methods In Industrial Hygiene," Dr. Joseph Dalla Valle, P. A. Sanitary Engineer, U. S. Public Health Service, Washington, D. C.; "The Industrial Breathing Zone," Mr. H. O. Danz, Assistant Manager, Power Equipment Department, American Blower Corporation, Detroit; "Practical Methods for the Control of Hygienic Exposures," Mr. G. A. Coburn, Personnel Director, Delco-Remy Division, General Motors Corporation, Anderson, Indiana.

Wednesday, May 5.—Morning session, 9:00 A. M., Detroit Institute of Arts; Industrial Dermatoses, presiding, Dr. Arthur E. Schiller, Detroit Dermatological Society; "Eczematous Dermatoses of Occupational Nature, with Special Reference to Proof of Occupational Origin," Dr. Marian B. Sulzberger, Associate Professor of Clinical Dermatology and Syphilology, Columbia University, New York City; "Industrial Dermatoses in Relation to Compensation," Dr. Robert C. Jamieson, Detroit Dermatological Society; "A System of Therapy for the Industrial Dermatological Case," Dr. Loren Shaffer, Detroit Dermatological Society.

Afternoon Session—2:00 P. M., The Detroit Institute of Arts; Occupational Diseases and the Practitioner of Medicine, presiding, Dr. C. C. Slemmons, Commissioner, Michigan Department of Health, Lansing; "The Medicolegal Trends in Occupational Diseases," Dr. C. O. Sappington, Consulting Industrial Hygienist, Chicago, Illinois; "Occupational Diseases and the General Practice of Medicine," Dr. Robert T. Legge, Professor of Hygiene, University of California, Berkeley, California; "Panel Discussion of Occupational Diseases and Industrial Hygiene," Leader, Dr. A. D. Lazenby, Chief Surgeon, Maryland Casualty Company, Baltimore, Maryland. (Ten outstanding persons in attendance including

industrial physicians, engineers, public health officials and industrial hygienists will constitute a panel for the discussion of questions submitted in writing related to occupational diseases and industrial hygiene. Additional questions may be submitted from the floor and discussion by those in attendance will be invited.)

American Association of Industrial Physicians and Surgeons

All sessions convene at 9:00 A. M. and 2:00 P. M. and will be held in the Statler Hotel. Dr. Robert P. Knapp, President, American Association of Industrial Physicians and Surgeons, will preside.

Thursday, May 6.—Following a business session will be the address of the President, Dr. Robert P. Knapp, Medical Director, Cheney Brothers, South Manchester, Connecticut; "Solvents, Their Hazards and Safe Practices in Industry," Dr. A. L. Brooks, Medical Director, Fisher Body Corporation, Detroit; "Compensation for Occupational Diseases," Dr. James A. Britton, Medical Director, International Harvester Company, Chicago, Illinois.

Afternoon Session—Chairman, Dr. R. R. Sayers, M.D. (President-Elect); Round Table on Industrial Hygiene, Dr. R. R. Sayers, Medical Officer in Charge, Industrial Hygiene and Sanitation, U. S. Public Health Service, Washington, D. C.

Banquet and Evening Session—The members of the Association will be guests of General Motors Corporation. (Others are invited to attend by subscription.) Toastmaster and chairman, Dr. Loyal A. Shoudy, Chief of Medical Service, Bethlehem Steel Company, Bethlehem, Pennsylvania; Address, Dr. Harry E. Mock, Associate Professor of Surgery, Northwestern University Medical School, Chicago; Address, C. F. Kettering, Vice-President in Charge of Research, General Motors Corporation, Detroit.

Friday, May 7.—Morning Session—Chairman, Dr. McIver Woody (Second Vice-President); (1) "Trends in Industrial Surgery," Dr. John J. Moorhead, New York City; (2) "Bronchogenic Carcinoma," Dr. Carleton B. Peirce, Associate Professor, Department of Roentgenology, University of Michigan; (3) "Medicolegal Aspects of Sudden Deaths in Industry," Dr. Plinn F. Morse, Director of Laboratories, Harper Hospital; (4) "Economics and Ethics of Medicine," Dr. R. G. Leland, Director, Bureau of Medical Economics, American Medical Association, Chicago. Luncheon-chairman, Dr. John J. Prendergast, Medical Director, Chrysler Corporation. The members of the Association will be guests of the Chrysler Corporation and will be addressed by Mr. K. T. Keller, President of the Corporation, on some such subject as "The Value of Medicine to Industry."

Afternoon Session—Chairman, Dr. Otto P. Geier; Round Table on Industrial Medicine and Surgery, Dr. Otto P. Geier, Cincinnati Milling Machine Company, Cincinnati, Ohio.

Saturday, May 8.—For members who wish to remain over and visit medical departments and laboratories in the various plants in Detroit, special arrangements will be made.

"Refresher" courses in Pediatrics, organized by the State Department of Health and financed with Social Security funds, are being arranged to cover four areas in the northern part of the Lower Peninsula, for the weeks of May 3, 10, 17, 24.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

PRINCIPLES OF CHEMISTRY, An Introductory Textbook of Inorganic, Organic and Physiological Chemistry for Nurses and Students of Home Economics and Applied Chemistry; with Laboratory Experiments, by Joseph H. Roe, Ph.D., Professor of Biochemistry, School of Medicine, George Washington University; Formerly Instructor in Chemistry, Central School of Nursing, Washington, D.C. Fourth edition. St. Louis: The C. V. Mosby Company, 1936. Price, \$2.75.

FUNDAMENTALS OF HUMAN PHYSIOLOGY. By the late J. J. R. Macleod, M.B., D.Sc., F.R.S., late Regius Professor of Physiology in the University of Aberdeen, Scotland; formerly Professor of Physiology in the University of Toronto, Toronto, Canada; formerly Professor of Physiology, Western Reserve University, Cleveland, Ohio; and R. J. Seymour, M.S., M.D., Professor of Physiology, Ohio State University, Columbus, Ohio. Fourth edition. St. Louis: The C. V. Mosby Company, 1936. Price, \$2.50.

CLIO MEDICA, GREEK MEDICINE. By Fred B. Lund, M.D., Boston, Massachusetts, with seven illustrations. New York: Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, 1936.

This little work is an interesting account of Greek medicine in thirteen brief chapters which starts with Hippocrates, discusses the Alexandrian school, the Empiric school, Greek medicine in the Roman Empire, the Methodists, Celsus and Pliny, the Pneumatic and Eclectic schools, Aretaeus, Galen and Oribasius. The work provides a very interesting evening's reading.

LIGHT THERAPY. By Frank Hammond Krusen, M.D., Associate professor of physical medicine, The Mayo Foundation, University of Minnesota; Head of the section on physical therapy, The Mayo Clinic. Forty-two illustrations, second edition, revised and enlarged. Paul B. Hoeber, Inc., Medical Book Department of Harper and Brothers, New York, 1937.

A book that should be read and thoroughly digested by all physicians who use light therapy in their practice.

THE MANAGEMENT OF OBSTETRIC DIFFICULTIES. By Paul Titus, M.D., Obstetrician and Gynecologist to the St. Margaret's Memorial Hospital, Pittsburgh; Consulting Obstetrician and Gynecologist to the Pittsburgh City Homes and Hospital, Mayview, and to the Homestead Hospital, Homestead, Pa., Secretary of the American Board of Obstetrics and Gynecology. With 314 illustrations, including four color plates. The C. V. Mosby Company, St. Louis, 1937.

This volume of 878 pages is not intended as a conventional textbook, but a handbook for advanced students, hospital residents undergoing their special training and for those interested in abnormal phases of obstetrics. There are a few chapters devoted to gynecology dealing more particularly with pelvic floor damage, postpartum uterine displacements and their treatment, tumor growths complicating pregnancy and ectopic pregnancy and diseases of uterine cervix. The work is somewhat different from the usual books devoted to this subject but the differences are in the way of improvement. The publishers have maintained their usual high standards in illustrations which are a distinct advantage to the text. This volume is recommended particularly to the obstetrician.

PHYSICAL DIAGNOSIS, by Ralph H. Major, M.D., Professor of Medicine in the University of Kansas, with 427 Illustrations. Philadelphia and London: W. B. Saunders Company, 1937.

In this book is found a description of the various procedures usually discussed in a book of this type. Especial attention might be called to the chapter on Pain and its location as a means of arriving at a diagnosis. This appears to be a valuable addition to a work on physical diagnosis, not usually found. Special mention should also be made of the chapter on General Inspection. Here we find discussed such factors in diagnosis as posture, gait, speech, stature, movements, et cetera, which are observed, when viewing the patient as a whole. Likewise the chapter on Examination of the Head and Neck is noteworthy, because, in it, the student is taught many things that may be acquired by a careful examination of this region of the body. Rather more attention is given to the examination of the abdomen, genitalia and the extremities, than is usually found. A short chapter is devoted to the examination of the nervous system. This phase of diagnosis, which is so often neglected might well be given more attention.

The book is well written and throughout the work many fine illustrations amplify the lessons of the text.

AN INTRODUCTION TO GENERAL PRACTICE. By E. Kaye Le Fleming, M.A., M.D., Chairman of Council, British Medical Association. Direct Representative, General Medical Council. Chairman of the Conference of Local Medical and Panel Committees, 1925-30. Chairman, Representative Body, B. M. A., 1931-1934. Baltimore: William Wood & Company, 1936. Price, \$2.00.

The title of this little book is somewhat ambiguous. The author, however, does not discuss the various diseases the general practitioner is called upon to treat. It is rather a book of advice to the young man entering upon the general practice of medicine. It deals with the many so-called socialized and financial aspects of the subject. While it is written particularly for the young man entering the practice of medicine in Great Britain, there are many things in it of value to the American general practitioner. Where it does not bear directly upon the American physician's work, it will at least afford him an interesting account of such things as the panel practice of medicine as it is in Great Britain. The work is written in an easy, one might say almost conversational, style.

THE 1936 YEAR BOOK OF NEUROLOGY, PSYCHIATRY AND ENDOCRINOLOGY. Neurology edited by Hans H. Reese, M.D., Professor of Neurology and Psychiatry, University of Wisconsin Medical School, Psychiatry edited by Harry A. Paskind, M.D., Ph.D., Assistant Professor of Nervous and Mental Diseases, Northwestern University School of Medicine; Attending Neurologist, Evanston Hospital; and Endocrinology edited by Elmer L. Sevringhaus, M.D., Associate Professor of Medicine, University of Wisconsin Medical School. The Year Book Publishers, Incorporated, 304 South Dearborn Street, Chicago. Price, \$3.00.

This work discusses the 1936 advances, whatever they may have been, in the domain of neurology and psychiatry. The volume also includes a section on endocrinology. Most of the advances of 1936 in all the departments of medicine and surgery are not to be found in the various textbooks. It is only by careful and judicious sifting of the periodic literature on the phases of the various subjects dealt with that it is possible to produce the 1936 Yearbook. We have had occasion to comment on other numbers of this series, and will repeat in substance that the publishers are to be congratulated on the enterprise and the authors are to be commended upon the thoroughness in judgment with which they have accomplished their task.

The Forty-eighth Annual
DETROIT CLINICS
sponsored by the Alumni Association
of the
Wayne University College of Medicine
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JUNE 16 and 17, 1937

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PHYSICIAN WANTED—Village of 300, with large rural area. Resort section in summer. No physician on three sides for 14 miles, and 6 miles to the south. For further particulars write Arthur Royce, Mecosta, Michigan.

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THE JOURNAL

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PRACTICAL HINTS ON THE TREATMENT OF DISSEMINATE NEURODERMATITIS*

FRED WISE, M.D.†
NEW YORK CITY

The clinical features of disseminate neurodermatitis are familiar to dermatologists and have always been of interest to allergists and pediatricians. Recognized and described by Vidal about 1886, and by Brocq and Jacquet in 1891, the disease, designated by the latter as diffuse pruritus with lichenification, has long been known as a clinical entity under various names: diffuse neurodermatitis, late exudative eczematoide of Rost, allergic dermatitis, and more recently—to conform with Coca's conception of atopy—atopic dermatitis.

The dermatosis is not an eczema and such designations as "flexural eczema" and "allergic eczema" should be discarded with reference to neurodermatitis. One source of confusion merits emphasis; namely, the fact that various manifestations of *circumscribed* pruritus with lichenification, lichen simplex chronicus, is pathogenetically unrelated to disseminate neurodermatitis; for one reason, the allergic and immunologic features peculiar to the diffuse form are usually lacking in the circumscribed, isolated forms.

My interest in the disease was aroused over thirty years ago, during my first week as an interne at the New York Skin and Cancer Hospital. In that first week, I learned that neither Fox, nor Bulkley, nor Whitehouse, nor Aitken seemed to make much of a hit with patients afflicted with this eruption. That was 'way back in 1905. Now, in 1936, after so many years of listening to papers, reading articles—and even writing articles myself—about the disease, picture my chagrin at having to admit that my neurodermatitis patients regard me with

no more favor than did such patients regard my old teachers.

I believe that some of our younger colleagues harbor the idea that the intimate relationship between disseminate neurodermatitis and the asthma-hay fever complex is a clinical observation of recent times. To the contrary, dermatologists have been aware of this relationship for many years. Cazenave mentioned it in 1844. Brocq and his pupils, beginning about the year 1891, published a series of monographs in which the relationship was stressed. In this country, Bulkley directed attention to the coincidence of eczema, hay fever and asthma, in a book on eczema, published in 1901.‡ In 1919 and again in 1923, I made an attempt to stimulate interest in the subject with two articles, one of which included an abstract of Brocq's original contributions, which had received but little publicity in this country, up to that time. In these papers, I mentioned the obvious clinical and morphologic

*Read at the Michigan State Medical Society, Section on Dermatology and Syphilology, Detroit, September 23, 1936.

†See page 348, "Among Our Contributors."

‡Eczema; with an Analysis of 8,000 Cases of the Disease, p. 41. G. P. Putnam's Sons. The Knickerbocker Press, New York, 1901.

differences between the circumscribed and disseminate varieties of neurodermatitis and of primary and secondary lichenification. In recent years, noteworthy contributions have been made by Rost, Ormsby, Stokes, Peck, Van de Erve, Becker, Obermayer, and Sulzberger and his co-authors. Allergists and pediatricians also—Coca, Rackemann, Hill and others—have recorded their interesting observations in recent publications.

Coca propounded the concept of atopy. Today we know that in approximately 50 per cent of patients with diffuse neurodermatitis, there is a definite family or personal history of allergy or atopy, or both, roughly corresponding with the incidence in hay fever, asthma and vasomotor rhinitis patients. In other words, disseminate neurodermatitis is in all probability an *allergoderma* (Perutz).

Von Pirquet, in 1906, coined the word allergy. His definition of the term has been translated as "a specifically altered state produced by previous exposure, and made manifest by subsequent exposure to the same (or some closely related) substance." This definition has been subjected to considerable embellishment, modification and even distortion; but—in the opinion of experts—it fulfills all the requirements for an understanding and working hypothesis of the concept of allergy with respect to skin (and other) diseases. Coca defined atopy as "certain clinical forms of human hypersensitivity that do not occur, as far as is known, in the lower animals, and which are subject to hereditary influence."

My main object in recalling to you the definitions of these familiar concepts is to emphasize the fact that a comprehension of their significance and a utilization of their principles has proved of little practical value, in my hands, in the treatment of patients with disseminate neurodermatitis. Mind you, I am speaking for myself only; other clinicians, judging from their reports, seem to have been more successful. In my experience, elimination procedures directed against well established allergic manifestations, have thus far proved unsatisfactory, with the possible exception of isolated cases which improve after complete change of environment. Nevertheless, I fully appreciate the paramount importance of the role played by allergy, and the full significance of the immunologic features of the disease im-

presses me as much as it does the allergist. But unfortunately, I can recall not a single patient with disseminate neurodermatitis, who, willing enough to run the whole gamut of "anti-allergic" procedures, had enough fortitude to refrain from topical applications of antipruritic and anti-inflammatory remedies, or administration of radiation therapy. In the evaluation of therapeutic results obtained by means of food eliminations, specific and non-specific desensitization procedures and so forth, the palliative and even curative action of topical remedies cannot, it seems to me, be ignored. Nearly all patients have periods of remission and exacerbation, usually without discoverable cause. Some patients recover with treatment, others without treatment, and still others despite treatment. Spontaneous recovery is by no means infrequent. That there are instances of seasonal recurrences and exacerbations, and that *some* patients are relieved and even cured by elimination of certain foods, inhalants and other allergens, is an established fact. But I have the distinct impression that the one great factor instrumental in the relief and cure of such cases is the onward passage of *time*—lots of time!

The approach to therapy so nicely outlined by Stokes, Becker and others already mentioned, promises to become a decidedly useful *adjuvant* in the management of the dermatosis. I believe that patients, whenever possible, should be treated by the neurologist in intimate coöperation with the dermatologist. But for the dermatologist alone to carry out the treatment recommended by those who emphasize the neuropsychogenic features, is not an easy job. I, myself, find it impossible of accomplishment. I have too much of other work on my hands.

I recall an intelligent, middle-aged lady in private practice, whose attacks of widely disseminated neurodermatitis occurred almost exclusively on the not infrequent occasions when her husband took himself off on an alcoholic debauch. Definite manifestations of both atopy and allergy were linked with her dermatosis, but that made no difference; the skin cleared up nicely in the intervals between her husband's indiscretions, despite the fact that all other elements implicit in her allergic manifestations retained their *status quo*. She had many positive

and many negative cutaneous tests, carried out my instructions faithfully, but all to no avail: when hubby got drunk, she broke out again and again. She took up an awful lot of my time and at one of her visits, in desperation, I re-read a certain article, mused over its contents for a while, scratched my head, and advised her to divorce her husband. That occasion was her last visit to my office.

To me it appears that therapy based chiefly on the neurogenic and emotional features is applicable mostly to well-to-do patients who can afford to indulge in such luxuries as consultants, hospital rooms, nurses, and doctors who have plenty of time.

What is to be said, then, about our dispensary cases, most of whom are supposed to work for a living? In a clinic in which it is not unusual to attend to two hundred to two hundred and fifty patients in a short afternoon, we barely have enough time properly to fill in the various items in our case-charts. If we succeed in eliciting a fairly definite history of infantile eczema and subsequent attacks of neurodermatitis during childhood and adolescence, we reckon we've accomplished something at the patient's initial visit. These people want relief and want it quickly. Perhaps one out of a hundred is willing or able to stop work and can afford hospitalization. A certain proportion gladly submits to scratch, patch and other laboratory tests and when these are completed they ask naively, "what next?" Then one scans the laboratory reports, maps out a plan of therapy conforming to such reports, instructs the patient to return at certain intervals and finally winds up by prescribing almost the identical remedies that one prescribed prior to the report of the laboratory findings. While this may seem somewhat of an exaggeration, it certainly holds true for the average dispensary patient.

When combined with other remedies, treatment directed toward endocrine dysfunctions seems, in selected cases, to have had some measure of success. The detection and possible elimination of foci of infection and the role played by gastro-intestinal disturbances must always be borne in mind. Fairly satisfactory results have occasionally been obtained by medication directed toward the autonomic nervous system. Brack called attention to the value of

such remedies as pilocarpine, atropine, ergotamine and yohimbin. In this connection I quote from Goldsmith's recent book:

"Kraus and Zondek grouped together the vegetative nervous system, the hormonal apparatus and the shifting of electrolytes in the cells under the term 'the vegetative system.' Between these groups of functions there is such close reciprocity and mutual dependence that there is probably also a special ease of transformation of one type of energy into another, enabling them to act as substitutes for each other vicariously. It is further obvious that the affective (psychical) energies have the closest reciprocal connection both with the autonomic nervous system and with hormonal circulation. The affective sphere can therefore be included as a further partner in the vegetative system. There are no psychogenic diseases, *sui generis*, recognizable as such at sight. But that pathological cutaneous phenomena are conditioned by the psychical state, in their development, course and curability, is undeniable."

From the foregoing statements one may adduce the logical conclusion that disseminate neurodermatitis is a disease having a complex and probably variable pathogenesis and that its adequate treatment requires knowledge of the entire field of medicine, instead of only the specialistic learning of the dermatologist, the allergist, the psycho-neurologist and the endocrinologist.

Alleviation and relief of itching and inflammation are the primary objects of active therapy. To accomplish these, the skill of the dermatologist in the use of antipruritic and sedative remedies is an essential requirement. Remedial measures may be grouped under the heads of (1) general remedies, (2) specific remedies, (3) non-specific remedies. Under the head of general therapy are included the following procedures: the use of restraining jackets or splints or strapping, to prevent scratching; removal to a different environment; rest in bed; the administration of sedatives and hypnotics; balneotherapy and neuro-psychotherapy. Specific remedies embrace elimination of suspected foods and inhalants and the administration of specific desensitizing (or hypo-sensitizing) agents to combat the existing allergic manifestations. (I have had no experience with allergen-free chambers.) Non-specific procedures include internal, parenteral and topical remedies.

Drugs employed with varying degrees of success are strontium bromide combined with 20 per cent glucose solution administered intravenously; pilocarpine hydrochloride, injected in a one per cent solution in daily ascending dosage; atropine sulphate,

beginning with 1/200 to 1/100 of a grain, and stepping the dose up gradually to the dosis tolerata; ephedrine and the combination of ephedrine and amytal; bromides and phenobarbital; various calcium preparations are employed in large dosages, both orally and intravenously; sodium thiosulphate and calcium thiosulphate given intravenously are sometimes effective. An aqueous solution of lobeline sulphate is recommended for trial by Dr. Ramirez of New York. It is administered subcutaneously in daily doses of 3/20 of a grain. In chronic cases, with pronounced lichenification, arsenic should be given a thorough trial. With such remedies as "aolan" and milk injections, and with a turpentine product called "olobintin," I have had no beneficial results. I tried a product called "eschatin," a cortical hormone extract, in four patients recently, without effect on the itching or the eruption, nor have I encountered patients showing definite effects from thyroid therapy, with respect to itching and inflammation. I have had no experience with hydrochloric acid medication. Autohemotherapy seems to me to be of very limited value, but should be given a trial. Spinal puncture is said to be of value to combat the itching, but I have had no experience with this procedure.

At one time I thought that pilocarpine seemed to exert more beneficial effects on itching than any of the other remedies mentioned. Later I discovered that some patients responded much better to the antagonist of pilocarpine, namely atropine. The indications for either of these drugs, as pointed out among others by Brack, are difficult to determine, as a rule. Theoretically, pilocarpine is sometimes efficacious in patients showing overactivity of the sympathetics, associated with rapid pulse, dilated pupils, hypoacidity, atonic constipation and hyperadrenalemia. Atropine on the other hand paralyzes the parasympathetic nervous system and is therefore indicated in the so-called vagotonic state, which is associated with atopy and with evidences of overactivity of the vagus, such as eosinophilia, bradycardia, contracted pupils, calcium deficiency, hyperacidity and spastic constipation. As our knowledge of the specific action of most drugs on the autonomic nervous system is at best vague and incomplete, the use of pilocarpine and atropine in neurodermatitis, is still empiric. This is partly accounted for

by the fact that hyperexcitability and hypoexcitability of the sympathetic nervous system may occur at different times in the same individual.

In the category of direct antipruritic agents, the employment of splints on the extremities and of restraining jackets[†] for both infants and adults, is of great value. These contrivances are more effective in combating the vicious circle of itching and scratching, with their resultant exacerbations, than any single remedy. Patients who protest against their use at first, later accept them with equanimity. The majority of patients need apply them only at night, but in some instances, constant restraint is indicated.

Roentgen and ultraviolet therapy are next in order of effectiveness as antipruritic agents. I employ these remedies as routine measures, especially in patients in their initial attacks. Alternation of Roentgen and ultraviolet exposures at succeeding bi-weekly visits, is often helpful. In patients who have had their full measure of Roentgen ray therapy in one or two courses, further radiation apparently has no merit and might prove dangerous, even after a long interval. Ultraviolet helps some patients and makes some worse.

Wet dressings and antipruritic lotions are indicated in the large majority of patients. Ointments or pastes are used in cases with secondary eczematization, pyodermic infection and dry, infiltrated lichenification, as in ordinary eczema. For wet dressings, I use solutions of diluted liquor Burowi, boric acid and potassium permanganate. My favorite shake lotions are calamine and zinc lotion and liquor Burowi lotion; the formula for the latter is as follows: Liq. Burowi 30.0, Zinc oxide and Talcum, aa 60.0, Glycerine 48.0, Lime water, q. s. ad 240.0. Constant use of these lotions often causes too much drying of the skin; when that occurs, I substitute Pusey's calamine and zinc oxide liniment, or use the latter alternating with one of the others.

Incorporated with these lotions are the following antipruritics, each of which may be used alone or in combination: menthol, camphor-chloral, liquor carbonis detergens, resorcin, and in limited areas, phenol in 2 to

[†]Goldman, L.: A restraining jacket for the prevention of scratching. Arch. Dermat. and Syph., 33:2, 349, (Feb.) 1936.

4 per cent strength. When these fail to stop itching, benzocaine, from 6 to 10 per cent strength, should be added. As benzocaine sometimes acts as a sensitizer, it is wise to do a patch test with it, a day or so before its application, to determine the patient's sensitivity. Under any circumstances, benzocaine compounds should be confined to only small areas of the cutaneous surface at a given time, on account of the danger of absorption of the drug.

Baths containing starch, bran, tar preparations, potassium permanganate and so forth, are of little real value. Their usefulness can be determined only by trial and error. Sea bathing and moderate exposure to sunlight seem to benefit individual cases.

One of the most important factors in the alleviation of symptoms is the adequate and meticulous application of topical remedies. Nurses and orderlies are usually remiss and careless in performing this job. The wet dressings should consist of light weight wrappings of gauze, and should be kept constantly moistened. Shake lotions should be

painted on all non-hairy areas with a flat varnish brush of good quality and applications should be made as frequently as every two or three hours. Restraining contrivances should be inspected several times during the night, as patients are prone to remove them while half asleep. When the solid constituents of shake lotions become caked on the skin, removal with warm boric acid solution should be patiently carried out. In a nut shell, good nursing is one of the essential factors in adequate treatment.

In conclusion, let me say that I am quite aware that nothing new, or "hitherto unpublished" has been offered in this paper. What I have tried to do, is to present the subject in a somewhat broader frame than has been done in recent publications, in the hope that it might be a short step toward a "systematization of confusion."

Bibliography

A complete bibliography and references to literature herein mentioned may be found in a review of Allergy in Dermatology, by Sulzberger, in *The Journal of Allergy*, Volume 7, No. 4, p. 385, May, 1936.

APPARATUS FOR PSYCHOPHYSICAL TESTING OF AUTOMOBILE DRIVERS*

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In order to carry out proper exact testing procedure in evaluating the functional capacity of automobile drivers to handle a motor car properly, much apparatus has been devised or modified for the Psychopathic Clinic of the Recorder's Court. Nineteen different psychophysical and visual tests are used, combined with a physical and a psychiatric examination. Two new modifications of driver testing apparatus have been built.

1. The reactograph, built by C. A. Parkin, which is a combination of the reaction time apparatus used by Lauer and Weiss,² DeSilva,¹ and Myers,³ and the drivo-graph devised by Lauer and Weiss² and Myers.³ The advantage of this apparatus is that it turns out a written record of simple braking reaction time and of steering ability. Blood pressure and respiration are simultaneously recorded by an air-pressure system (c). The recording device is shown in Figure 1. Knob (A) is turned following a timed pattern and moves a stimulus (D) arrow shown in the front of the reactograph seen to the left of Figure 2. The steering wheel moves an opposite arrow. A reducing gear moves a stylograph pen or pencil over the paper

pulled over platen (B) by a constant speed motor. A marking pen or pencil (C) presses on the moving paper when a red light stimulus (F) is given and a similar marker is depressed when the contact is closed by the brake pedal. There is a time marker enabling reaction time and driving response to be measured in hundredths of a second, although tenths of a second are sufficiently accurate for practical purposes.

Figure 2, also shows a test table modified from the apparatus devised by Viteles⁴ and McCarter of Cleveland. The individual being tested drives a small car (X), regulat-

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†See page 348, "Among Our Contributors."

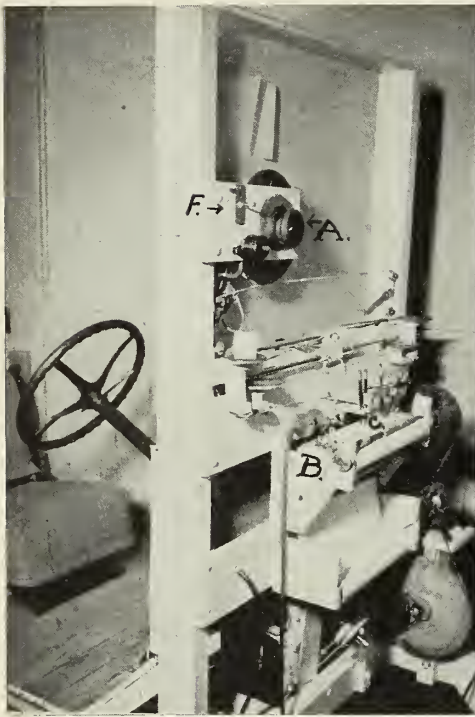


Fig. 1.

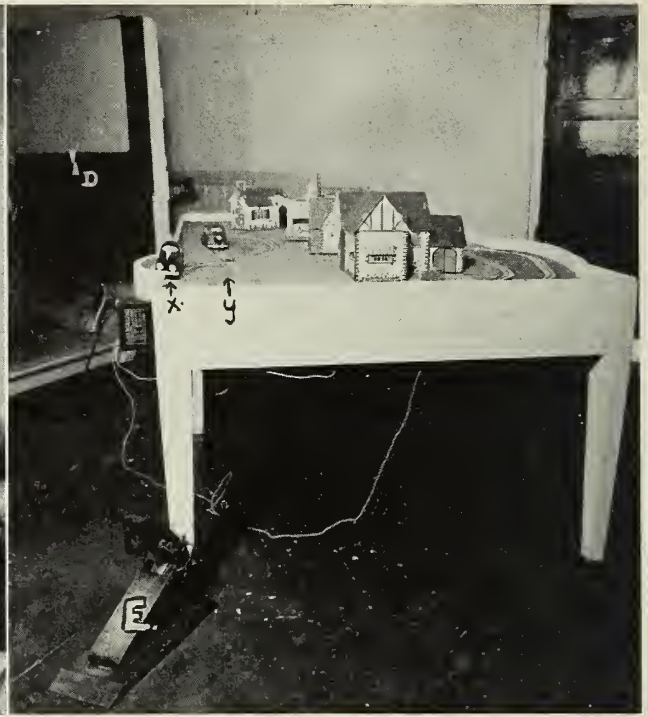


Fig. 2.

ing its speed and stopping it by use of the accelerator (*E*). A second car (*Y*) is under the control of the examiner and runs at a constant speed. The photograph shows that about one-sixth of the track is masked by cardboard houses, thus making it necessary for the patient to make quick judgments of speed in impending accident situations. There are five places where the cars cannot pass and after three test trips around the track the patient must gauge his own speed and that of the experimenter's car so that he will operate his car in order that they will not collide at these danger points. Each machine is standardized on good, violations-prone, and accident-prone

drivers. These apparatus are only used as part of the whole battery of tests and are not diagnostic in themselves, but grossly poor responses on them have been found to be indicative of emotional, intellectual, and physical disabilities which later on are broken down and analyzed by other examination technics and are an aid to the diagnosis and determination of prognosis of driving maladjustment.

References

1. DeSilva, H. R.: Research on Driving Skill, 1935.
2. Lauer, A. R., and Weiss, A. P.: Psychological Principles of Automobile Driving, 1930.
3. Myers, C. S.: The Human Factor in Accidents, 1935.
4. Viteles, Morris: Research in selection of motormen. Jour. Personnel Research, 1925.

UREA: ITS USE IN INFECTIONS

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In 1923 the writer³ reported a series⁴ of thirty-one cases of osteomyelitis affecting various bones of the body, and in five of which he was able to trace, chronic recurrent lesions developed. The mode of treatment followed was surgical incision and drainage. Some were treated with the Dakin solution technic and some by simple saucerization and drainage. In the early cases good results were obtained in about six weeks, but it seemed that once a case went beyond that period it became chronic and necessitated further operative procedures.

Baer² developed the treatment of osteomyelitis by the so-called maggot procedure, which proved very successful in his hands in a large percentage of cases. The drawback was the objection of the patient to the sensation of the crawling maggots and the difficulty in obtaining and applying the maggots; the patient required special nursing and care.

Winnett Orr⁴ reported his well-known treatment of osteomyelitis consisting of immobilization and packing of the thoroughly saucerized lesions with vaselinized gauze and application of plaster-of-Paris cast with very infrequent changes.

Fred Albee¹ thought that the successful outcome of the treatment of infections of bone by the Orr method was due to the presence of bacteriophage in the wound, and in the wounds that did not heal well he demonstrated the absence of bacteriophage in appreciable quantities. He thought that when he applied bacteriophage to the wound in those cases his results became very gratifying. There is probably no place in surgery that is as trying for the patient, as well as the surgeon, as infections of bone tissue. Chemical sterilization of the wound, plus a thorough mechanical debriment is possible in very early infections only. Many infected wounds seem to become immune to chemical sterilization and a happy medium where the strength of the antiseptic solution is just sufficient to sterilize the infected wound and help to carry away the debris is impossible to find. Either the solution seems to be too weak, or if strong enough, it seems to retard or arrest healthy repair of the wound.

William Robinson⁶ reported that allantoin, which occurs in maggot excretions, affected the healing of wounds of indolent or chronic character. It was found by him

that urea, which is also present in maggot excretion, has similar effects to allantoin. The urea has an extremely wide distribution and may be prepared synthetically. He reported, in collaboration with many physicians, various infections treated with 2 per cent urea solution. The solution is bland, stable and non-toxic, and apparently has no ill effects upon the surrounding tissue. It is not an antiseptic, for germs can be easily conveyed in a strong solution of urea. It is easily soluble in distilled water and does not seem to possess proteolytic properties. Its main property seems to be a stimulus to proliferation of the cells of granulating tissue and increased development of capillaries. (The use of urine, which contains normally about two per cent urea, as a healing fluid has been resorted to for many centuries in Europe, Asia and Africa.) Robinson⁵ advocates the use of a two per cent solution, which is obtained by dissolving the crystals in distilled water. The tissues must be kept constantly in touch with the urea solution and the best way to obtain it is by keeping wicks of gauze in the wounds and pockets of the wounds, frequently moistening the gauze with the urea solution. I have used it in much stronger solution than two per cent in especially indolent wounds, and in several cases to be quoted I have used it by filling the wound with urea crystals.

Case 1.—Boy, nine years of age, gave a history of injury to the left foot two months prior. He was treated expectantly and with hot applications by his physician. About three weeks following his injury, he developed a discharging sinus which kept on draining and closed periodically.

When seen by me he had a swollen left foot, extremely tender dorsal region, which upon x-ray examination proved to be osteomyelitis of the third metatarsal. He was operated on August 10, 1936. The metatarsal was partially removed subperiostally, the wound was packed with vaselinized gauze and a plaster-of-Paris cast applied to the left extremity

†See page 348, "Among Our Contributors."

below the knee. The cast was bivalved in six weeks. The foot appeared less swollen, there was no tenderness, but there was still a discharging sinus. Frequent installations of two per cent urea into the fistulous tract caused a complete healing within two weeks. An x-ray re-examination on October 8, with the report that the part of the bone that was left was free from infection and that there were no areas of bone destruction seen. There was apparently some bone regeneration.

Case 2.—Girl, fourteen years of age, gave a history of injury, left iliac region, about a year prior to entrance to the hospital. At the time she entered the hospital, she complained of a tumor mass in the left lower abdominal wall. The ileum was not tender, neither was the mass. The mass grew slowly and began to appear about three months before entering the hospital. Six months prior she was operated on for appendicitis, due to some vague pains in her lower abdomen.

An x-ray examination disclosed no pathology of either the bones of the spine or the pelvic bones. An exploratory operation was done on July 27, 1936, at which time a sero-sanguinous fluid was evacuated from the mass which had many pockets—the fluid did not have any odor. The fibrous tissue forming and limiting the lesion was resected, which included a great deal of fibrosed muscle tissue. When the mass was finally resected and fluid removed, the empty space under the superficial fascia would admit a fist easily. The peritoneal cavity was not entered. The wound was closed in the usual manner with drains. The patient was kept in the hospital for several weeks with a discharging sinus, developing from the incision to within an inch of the crest of the ileum. The wound was treated with Dakin solution without any results. It was scraped several times without any results. Sclerosing solutions injected into the wounds produced no results. Finally a two per cent urea solution was attempted with the following technic: A wick of gauze was introduced from one end of the fistulous tract to the other end, leading out from the old drainage wound in the midline. Frequent soaking of the wick was resorted to with a two per cent urea solution. The fistulous tract became smaller and smaller, the wick was finally removed and frequent installations of the urea solution were resorted to. The wound healed completely in three weeks following the use of urea solution.

Case 3.—Man, sixty-two years of age, had received a fracture of the hip about a year ago. On September 7, he sustained a compound comminuted fracture of the left fibula and tibia. The operative record shows that he had a large wound leading from the external surface of the right leg inward, and over the ankle and extending for about two-thirds the length of the leg. The wound was partially sutured and was exuding an ill-smelling, bloody discharge with pus. A Kirschner pin was put through the os calcis, the sutures were removed and a cradle with electric lights was put over the wound without any dressing. There was a continuous discharge from the wound for several weeks. X-ray of the fragments showed good apposition but no signs of callus. The wound was then Dakinized without any appreciable results. The wound appeared angry, fragments of the bone were visible and discharge was profuse. In the latter part of December a solution of urea, two per cent was applied, continuously wetting the gauze over the wound. The result was almost miraculous. The wound became clean in less than a week and healthy granulation tissue appeared, coming in from all edges of the wound. From then on the wound

healed, and on February 5 the extremity was put in a plaster-of-Paris dressing and the x-ray report showed good apposition and beginning callus formation. Splenic extract⁷ was used on this case to stimulate callus formation.

Case 4.—On July 6, 1936, a resection of a blue dome cyst of the right breast was done on a woman forty-five years of age; the breast was not resected. Patient went home in ten days and later reported with a tumefaction in the region of the operation. The mass was incised, foul smelling pus was evacuated; drainage was instituted. The pus drainage subsided in a couple of weeks but a sinus remained with a gaping wound that did not heal. Various agents were tried and the patient was told that an operation would have to be done to stimulate wound repair. However, the wound was filled with urea crystals and a dressing put over the wound and the patient was instructed to instill ten per cent urea solution into the wound several times daily. The wound began to heal very rapidly and closed entirely within three weeks.

Case 5.—Young man, thirty years of age, with a chronic ischio-rectal abscess which was operated on in January, 1937. The abscess contained many pockets. The abscess was opened, the pockets were resected, the wound was packed loosely with gauze and moistened frequently with two per cent urea solution, and every third day the wound was filled with crystals of urea. Complete healing occurred in six weeks.

Case 6.—Woman, about fifty years of age, gave a history of frequent abdominal attacks. When examined there was a mass in the lower abdomen which moved with the uterus. Mass was painful, uterus appeared somewhat frozen, there was an infiltration of the right and left vaults. The blood count was 11,500 with 80 per cent polys. The bowels moved with great difficulty and only with enemas. There was no vomiting, temperature ranged from 98 to 100. The condition existed for several months. An exploratory laparotomy disclosed a retrocecal, subacute inflamed appendix with an old abscess leading to the uterus and involving the uterine body. The abscessed cavity was the size of a fetal head. The appendix was removed, the abdomen drained and part of the uterine wall was removed for a biopsy, which showed an active and inflammatory and infiltrating process of the muscle wall. Following the removal of the drains, a chronic sinus developed leading into the lower abdomen. Instillation with two per cent urea resulted in a quickly clearing of the wound and healthy granulation tissue appeared. Complete healing within three weeks following the use of two per cent urea solution.

Case 7.—Man, fifty-six years of age, was operated on November 26, 1936, for an acute exacerbation of chronic appendix. Patient did well and was to be discharged on the eleventh day, when upon removal of his sutures his wound opened up and several loops of small bowel came through. He was given an anesthetic, bowel reduced and the wound resutured. Inspection of the wound on the fourth day following resuturing, tenth day following resuture, and fourteenth day following resuture failed to disclose any union. There was no distention; there was no drainage except a slight sero-sanguinous discharge. On the seventeenth day following the resuture, the wound was slightly packed with gauze wicks and the patient was instructed to keep the wicks saturated constantly with a solution of urea by the drop method. On the twenty-fourth day

following the resuture there was good union in the upper and lower parts of the wound. The sutures were removed, the wound was still kept packed lightly with saturated solution of urea. Four weeks following the resuture, patient left the hospital with the wound firmly healed with no evidence of a herniation.

Case 8.—The patient was a man about sixty years of age, with a very extensive carbuncle of the posterior neck, practically embracing the entire posterior portion of the neck. He was a diabetic. An extensive resection with diathermy of the affected area was done, leaving a large surface exuding pus. On the third day following the operation, gauze wicks soaked in two per cent urea were used. The wound rapidly closed; skin graft was done on the third week following the operation. The wound healed rapidly with most of the graft taken. Some of the grafts were lost, due to faulty immobilization.

Remarks

There were many other cases treated with urea solution that showed a tendency to become indolent. It is my custom now to treat all discharging wounds by the method outlined, not fearing the use of crystals if the lower percentage of the solution does not give results.

Summary

Eight cases were presented in which the use of urea, according to the method outlined by Robinson were presented. The use of pure crystals has been resorted to in very indolent cases with apparently good results. There were two failures not reported above, but which could not be blamed on the solution, as both of these cases were in which sinus leading to osteomyelitic processes, and which have not been freshly operated on. Both of these patients were advised to have a saucerization operation with subsequent treatment.

It seems reasonable to assume that a new and very potent factor in the healing of indolent wounds has been added to the armamentarium of the surgeon.

References

1. Albee, F. H.: *Internat. Jour. Med. and Surg.*, 42:1, (Jan.) 1929.
2. Baer, W. S.: *Jour. Bone and Joint Surg.*, (July) 1931.
3. Bogart, Leon M.: *Jour. Mich. State Medical Society*, (Dec.) 1923.
4. Orr, H. W.: *Trans. Sect. Orthop. Surg. A. M. A.*, 1923; *Nebraska Med. Jour.*, 12:222, (June) 1927.
5. Robinson, W. J.: *Am. Jour. Surg.*, (August) 1936.
6. Robinson, W. J.: *Jour. Bone and Joint Surg.*, 17:261-71, 1935.
7. Wheeldon, Thomas: *Gynec. and Obst.*, (December) 1936.

INFANTILE AMAUROTIC FAMILY IDIOCY (TAY-SACHS' DISEASE) OF NON-JEWISH PARENTAGE*

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As is the case in most of the disease entities that appear to have exclusive racial predilection, infantile amaurotic idiocy has its rare exceptions. Following the earlier observations of Tay²³ and Sachs,¹⁸ it seemed that this fatal malady was entirely limited to the Hebrew race and, subsequently, the occurrence of occasional bona fide instances of non-Jewish origin mitigated but little against this striking predisposition. Up to the present time, fifteen true instances of this disease in non-Jewish families have been recorded,^{2, 3, 4, 5, 6, 7, 9, 12, 13, 16, 17, 19, 22, 24, 26} three of which were substantiated by the characteristic post-mortem findings. It is interesting to note that this group contains a report of the occurrence of the disease in a Japanese family.⁴ It is probable that if all cases of acute cerebral degeneration in infants were more carefully studied, a larger number of racial exceptions would be uncovered. This carries with it the implication that careful ophthalmoscopic examination, which contains the key to the diagnosis, should be religiously performed in all such cases. In this connection, it seems profitable to briefly discuss the outstanding features of this condition illustrating its occurrence in a non-Jewish family with an observed case.

The onset of the disease occurs usually at about the age of six months with the gradual development of listlessness and muscular weakness. The infant up to this time gives evidence of normal progress. With a loss of power to hold up its head or to sit up, complete paralysis either of the flaccid or spastic type sets in. Hyperacusis, an inordi-

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†See page 348, "Among Our Contributors."

nate sensitivity to auditory stimuli, may become a prominent symptom. Towards the latter part of the course of the disease, epileptiform seizures, clinical manifestations resembling decerebrate rigidity, and bulbar symptoms with drooling and respiratory difficulty may make their appearance. Blindness, of course, is an outstanding feature and ophthalmoscopic examination will reveal the pathognomonic cherry-red spot in the region of the macula lutea. This cherry-red spot is usually found in the center of a more or less round milky or pearly gray area, a finding usually easy to perceive. Optic atrophy and nystagmus may be present in addition. The course of the disease is progressive and death usually ensues within approximately eighteen months, although occasionally the disease may extend as long as three years.

Defective heredity is believed to be the dominant factor. Consanguinity, by its frequent incidence in the affected families, may be of definite significance. In many of the cases recorded it is notable that the parents were first cousins. It is important to stress, however, that an hereditary influence is not all-pervading in a given family, since some of the siblings develop normally and one of twins may be entirely normal, whereas the other may be an amaurotic idiot.

While this discussion deals primarily with the infantile form of Tay-Sachs' disease, it is of interest to mention, in passing, that several other forms of amaurotic idiocy exist, namely, a late infantile form, a juvenile form, and an adult form. All of these types differ from the most common infantile form in the time of onset, course, racial predilection and retinal changes. The late infantile type¹⁰ is of rare occurrence. The signs of deterioration appear at about three and one-half years and the disease process terminates with death in approximately four years. Non-Jews are affected and the cherry-red spot, so characteristic of the infantile type, is missing. The juvenile type²⁵ manifests itself usually at about six years and runs its course for about eight years. Non-Jews are affected and, as in the case of the late infantile type, the cherry-red spot is absent. Pigmentary changes (retinitis pigmentosa) and optic atrophy are to be found. The adult form¹¹ which is extremely rare, has its onset from twenty-one to twenty-six years. In this type also, retinitis

pigmentosa replaces the fundus findings of the infantile type.

The pathology of amaurotic family idiocy has been fully described and is characterized chiefly by widespread degenerative and developmental changes in the entire central nervous system. At autopsy, the brain is found to be of leathery consistency; there is convolutional atrophy, and the brain is apt to be reduced in size. The histological findings are typical. The ganglion cells throughout the central nervous system are involved. They are found to be bottle-shaped in appearance, the swelling of the cells being produced by the presence of hematoxylinophilic granules of lipoid character, lecithin-like substances or phosphatides. A variety of associated and secondary changes exist in the other structural components of the central nervous system.

The characteristic onset, the rapid mental and physical deterioration, blindness and the tell-tale ophthalmoscopic findings comprise a clinical picture that is difficult, with one exception, to confuse with other conditions. Another condition, Niemann-Pick's disease (lipoid histiocytosis), however, so closely resembles infantile amaurotic family idiocy in its racial predilection, clinical, chemical, and pathological aspects that some consider both conditions variants of a fundamental disturbance of lipoid metabolism. In Niemann-Pick's disease, the predisposition to occur in Jewish infants, the rapid mental and physical deterioration, blindness, and in a certain number of instances, the cherry-red spot are present. The pathological and chemical changes are very similar and often indistinguishable from those found in the infantile form of Tay-Sachs' disease. The course in Niemann-Pick's disease is more rapid, but the chief distinction lies in the involvement of the visceral organs, with enlargement of the spleen and liver.

Case Report

The patient, a baby girl, was brought to the clinic for the first time when she was ten months old because of weakness. Her parents were of pure Finnish stock and there were three children. Two were living and one had died at the age of sixteen months of a condition which the parents and family doctor thought closely resembled that of the patient under discussion.

The patient was born at term without abnormal circumstances. Her birth weight was eight pounds and she had progressed normally, according to the parents, up to the age of approximately seven and

one-half months, at which time increasing listlessness was noticed. By the end of the eighth month, weakness had so progressed that the infant lost its ability to hold up its head and to sit erect, although she had learned to sit up at the age of six and one-half months. It also became apparent that she was no longer attentive to her surroundings.

Examination showed an obese, flabby, listless baby, exhibiting little reaction to its environment. Hyperacusis was not marked. The spleen and liver were slightly enlarged, a finding which was confirmed by a roentgenogram of abdomen. The spleen was felt about two finger-breadths below the costal margin and the liver was barely palpable. Generalized hypotonicity was present. No spasticity was made out. Reflexes were unaltered. There was no clinical evidence of rickets. The anterior fontanelle was two finger-breadths wide and the cranial bossæ appeared normal. One erupted tooth was present. Vision, as tested by simple methods, appeared entirely lost. Ophthalmoscopic examination revealed extremely white discs. At the macular region, bilaterally, a grayish white area about one disc diameter in size with a cherry-red spot in its center was present."

Laboratory findings.—Blood Kahn and intracutaneous tuberculin tests were negative. Urinalysis was negative. Red count, 4,760,000; hemoglobin 83 per cent; white count, 23,000 with normal distribution of cells in the differential count.

Splenic puncture findings.—Because of the finding of an enlarged spleen and its possible connection with Niemann-Pick's disease, a splenic puncture was performed and a small amount of splenic pulp was obtained. This specimen was sent to Dr. Carl V. Weller, head of the Department of Pathology, University of Michigan Medical School, for examination. The material was stained by routine and special methods. No evidence of Niemann-Pick's or Gaucher's disease was found. There was possibly a slight hypertrophy of the reticulo-endothelium, but the cells were not significantly vacuolated. No foam cells were present. The Scharlach R. stain did not reveal the presence of lipids.

Course.—The infant was seen on three different occasions at the Clinic, when she was ten, eleven and twelve months respectively. The infant died at the age of seventeen and one-half months and unfortunately an opportunity to perform an autopsy did not present itself.

Summary

An instance of infantile amaurotic family idiocy in a non-Jewish infant is reported, which increases the number of such cases to sixteen. The patient's parents were of pure Finnish stock. The clinical picture in the majority of cases is typical and it appears very probable that, if each instance of acute mental and physical deterioration in infancy were studied carefully, especially ophthalmologically, a greater number of cases would be uncovered.

Bibliography

1. Bielschowsky, M.: *Deutsche Ztschr. f. Nervenhe.*, 50:7, 1914; *F. f. Psychol. u. Neurol.*, 26:193, 1920.
2. Cockayne, E. A., and Attlee, J.: *Proc. Roy. Soc. Med.*, 8:65, 1914.
3. Cohen, M.: *Arch. Ophth.*, 52:140, 1923.
4. Cordes, F. C., and Homer, W. D.: *Am. Jour. Ophth.*, 12:558, 1929.
5. Davis, A. J.: *Jour. Am. Inst. Homœop.*, 21:830, 1928.
6. Finnoff, W. C.: *Am. Jour. Ophth.*, 8:570, 1925.
7. Greear, J. N., Jr.: *South Med. Jour.*, 23:324, 1930.
8. Hassin, G. B.: *Arch. Neurol. & Psychiat.*, 16:708, 1926.
9. Hoppe, L. D., and Clay, G. E.: *Arch. Pediat.*, 41:389, 1924.
10. Jansky, J.: *Ztschr. f. d. Erforschung u. Behandlung d. jugendlich. Schwachsinns*, 3:86, 1910.
11. Kufs, H.: *Ztschr. f. d. ges. Neurol. u. Psychiat.*, 95:169, 1925.
12. Lebbetter, T. A.: *Canad. Med. Assn. Jour.*, 15:367, 1925.
13. Levy, A.: *Am. Jour. Ophth.*, 6:408, 1923.
14. Niemann, A.: *Jahrb. f. Kinderh.*, 79:1, 1914.
15. Pick, L.: *Ergebn. d. inn. Med. u. Kinderh.*, 29:519, 1926; *Med. Klin.*, 23:1483, 1927.
16. Ponders, C. M.: *Jour. Pediat.*, 2:216, 1933.
17. Roos, A.: *Jour. Pediat.*, 7:488, 1935.
18. Sachs, B.: *Jour. Nerv. and Ment. Dis.*, 14:541, 1887.
19. Schlesinger, B., Greenfield, J. A., and Stern, R. O.: *Arch. Dis. Child.*, 9:1, 1934.
20. Sjögren, T. S.: *Hereditas*, 14:197, 1931.
21. Spielmeyer, W.: *Nissl's Arb.*, 2:193, 1908.
22. Tarr, E. M.: *Louisville Month. Jour. Med. and Surg.*, 22:353, 1916.
23. Tay, W.: *Trans. Ophth. Soc. United Kingdom*, 1:55, 1881.
24. Vennti, A., and Santonoceto, O.: *Riv. di clin. pediat.*, 32:21, 1934.
25. Vogt, H.: *Monatschr. f. Psychiat. u. Neurol.*, 18:161, 310, 1905; 22:403, 490, 1907; 24:106, 1908.
26. VonStarch, W.: *Monatschr. f. Kinderh.*, 18:139, 1920.

FIVE-YEAR SURVEY OF ANTI-LEUTIC THERAPY IN THE YPSILANTI STATE HOSPITAL

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Syphilis of the central nervous system has occurred in 8.6 per cent of the population of the Ypsilanti State Hospital during the past five years. Many of these patients were far deteriorated when received, as they were not first admissions, but transfers from other institutions. It was therefore necessary to give intensive anti-leutic therapy. Many had received treatments prior to coming to the hospital, but treatments were continued in the hope of preventing further deterioration. Following herewith is presented an analysis of treatment and results obtained. Hyperpyrexia was the treatment of choice. The types used were (1) malaria, (2) diathermy, and (3) foreign protein. The majority of the cases were given malaria—the whole group

will be discussed under the heading Hyperpyrexia. In presenting a patient for anti-leutic therapy, after complete physical, neurological and mental examinations, the

†See page 348, "Among Our Contributors."

patient is submitted to a series of tests before admitting him to Hyperpyrexia, in an attempt to rule out any possible aneurysm, cardiac damage, renal insufficiency, or other somatic conditions that might contra-indicate a high temperature. The permission of the family is necessary before the treatment is given to the patient. The plan followed was to give at least fifty hours of a temperature of over 103 degrees Fahrenheit, if they are physically able to stand this temperature. Some have had much longer periods of over 103 degrees, one having had 111 hours. Recent discussion of hyperpyrexia treatment of paresis by Mr. Kettering and Dr. Simpson suggests that the standard should be seventy-five therapeutic hours of a temperature of over 105 degrees. That is in the treatment by short wave radio—other clinics have other standards.

We have found that malaria patients have to be carefully watched. We have a special ward where such patients are under constant supervision. There is the possibility of enlarged spleen with subsequent fracture of the spleen. Polayes and Lederer, in 1931, report on rupture of the spleen in induced malaria stating that there are about ten authentic cases of fracture of the spleen reported so far in the literature. This is noted by the author, but in this clinic we are glad to report that there has never been an incident of this, although there have been some enlarged spleens and it has been necessary to abort before the completion of the required number of hours. There is also a tendency to jaundice, and if this is severe, it is also an indication for culminating the treatment. We have found that malaria is the treatment of choice for mental patients. They are much easier to handle while having the high temperature than when having the temperature with diathermy, and, for that reason, we have not used diathermy for hyperpyrexia purposes for the past four years. If the patient is too weak to withstand malaria when first admitted, he is given a course of anti-leutic therapy in an attempt to improve his physical condition. Our plan is also to give intensive anti-leutic therapy following malaria. Following the malaria, another very careful physical, neurological and mental examination is made, plus intensive laboratory work. There is often a severe secondary anemia and

often some mild cardiac decompensation, and the patient has to be kept under supervision and bed rest for a period.

As stated above, 8.6 per cent of the population of the hospital, or in numbers, 269 patients, have had Central Nervous System Les. Of this number 158 General Paretics received malaria treatment plus heavy metals. One hundred eleven received only heavy metals. This was due to age, physical disability, or refusal of the family to give permission.

The following tables give the descriptive data of those receiving malaria plus heavy metals, divided by sexes:

I. MALE	No.	%
Paroled:		
Recovered	32	26.66
Improved	8	6.66
Deported	2	1.66
Transferred to other hospitals....	3	2.5
In Residence:		
Improved	41	34.1
Non-improved	15	12.5
Died	19	15.83
	<hr/> 120	

II. FEMALE	No.	%
Paroled:		
Recovered	3	7.92
Improved	12	31.5
Deported	1	2.68
Transferred to other hospitals...	0	
In Residence:		
Improved	14	36.8
Non-improved	6	15.7
Died	2	5.78
	<hr/> 38	

Tables III and IV cover the 111 patients who received only *Heavy Metals*, divided by sexes.

III. MALE	No.	%
Paroled:		
Recovered	2	2.24
Improved	8	8.9
Non-improved	3	3.3
Deported	3	3.3
Transferred to other hospitals....	2	2.24
In Residence:		
Improved	11	12.1
Non-improved	11	12.1
Died	50	56.1
	<hr/> 89	

IV. FEMALE	No.	%
Paroled:		
Recovered	0	
Improved	5	22.72
Non-improved	1	4.5
Deported	0	
Transferred to other hospitals...	0	
In Residence:		
Improved	2	9.09
Non-improved	5	22.72
Died	9	40.90
	<hr/> 22	

V. COMPARISON OF ABOVE FOUR TABLES

	% Malaria Plus Heavy Metals	% Only Heavy Metals
Male recovered.....	26.66	2.24
Female recovered	7.92	0
Male improved	6.66	8.9
Female improved	31.5	22.72
Male improved, but in residence	34.1	12.1
Female improved, but in residence	36.8	9.09
Male non-improved	12.5	15.7
Female non-improved	15.7	27.2
Male deaths	15.83	56.1
Female deaths	5.78	40.90

VI. AVERAGE DAYS, AGE AND HOURS OF FEVER THERAPY OF PARETICS:

Total patients admitted to June, 1936....	3128
Total paretics to July 1, 1936.....	269
Male	209
Female	60
Average hospital days of all paretics....	521
Male	503
Female	604
Average age of paretics.....	42.7
Youngest juvenile paretic.....	17
Youngest acquired paretic.....	23
Oldest in group.....	75
Number of paretics receiving hyperpyrexia	158
Average hospital days of those recovering and receiving malaria (1 yr. 2 mos.)	426
Average hospital days of those too weak for malaria who died.....	204
Average hours of fever of all cases....	52.1
Percentage of all paretics recovering...	13.7
Percentage of those receiving malaria recovering	22.1
Percentage of those receiving malaria improved	47.4
Percentage of those not receiving malaria improved	23.4

Figures seem to us rather encouraging, in that malaria does return many more patients to the community than those treated only with heavy metals. It also helps to arrest the deterioration and mental dilapidation which we know is the result of paresis. We do not have the bedridden paretic patient, as used to be seen years ago, with the skin lesions, untidiness, bed sores, et cetera. This, of course, lessens the nursing problem in a large state hospital.

We were also very much interested in our paroled paretic patients as to the amount of social rehabilitation they had achieved by treatment. This hospital maintains an Out-Patient Department, which sees all paroled patients under the general title of Clinic Supervision. The patient re-

ports to the clinic physician and to the social worker at regular intervals. A check is made of the patient's mental, physical and neurologic health, and the adjustment in the community, and advice is given as indicated for social rehabilitation, and also medically as to whether the patient should have more treatment. We have followed very closely seventy-two paroled general paretic patients. Thirteen of these did not receive malaria. Herewith are presented two tables as a result of this survey. It should be stated that in this group there might have been placed nine women, who have been returned to the community, and who would be able to be self-supporting if they did not have husbands to support them or private incomes. Following is a result of the survey:

Paroled patients not receiving malaria:

No information	5
Supported by others or private income.....	2
\$ 20-\$ 30 a month.....	1
\$ 30-\$ 40 a month.....	2
\$120-\$130 a month.....	2

Paroled patients receiving malaria:

No information	10
Supported by others or private income.....	24
\$ 20-\$ 30 a month.....	3
\$ 30-\$ 40 a month.....	4
\$ 50-\$ 60 a month.....	3
\$ 60-\$ 70 a month.....	2
\$ 70-\$ 80 a month.....	2
\$ 80-\$ 90 a month.....	1
\$ 90-\$100 a month.....	1
\$100-\$110 a month.....	3
\$120-\$130 a month.....	2
\$140-\$150 a month.....	1
\$150-\$160 a month.....	2
\$200 a month.....	1

To summarize the above statistics of five years of intensive anti-leutic therapy in the Ypsilanti State Hospital, a series of treatment of 269 patients, the figures point to more favorable results in treating the patient suffering from Central Nervous System Lues with malaria plus heavy metals than with only heavy metals. The recovery rate is much greater in both men and women. The rehabilitation of those Paretics receiving malaria plus heavy metals is much more marked than in the group with only heavy metals. The table of the patients given malaria plus heavy metals points conclusively to the fact that the rehabilitated patients are able to work in greater numbers, some receiving salaries comparable to salaries of the average wage earner.

THE RÔLE OF THE STREPTOCOCCUS IN THE ETIOLOGY OF PEMPHIGUS, LUPUS ERYTHEMATOSUS AND THE ERYTHEMA GROUP OF HEMATOGENOUS DERMATOSES

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This paper, begun originally to fill a place on our program for tuberculosis and the tuberculids, has wandered far afield. I felt that I had little to offer a dermatologic group in the realm of tuberculosis. My paper belongs more properly to the field of allergy; dealing with cutaneous allergic syndromes, having a probable focal infection basis. I realize this presentation will be theory with only occasional proofs, yet I hope it will prove novel and stimulating.

The inspiration for this paper arose through two cases that I have seen recently of an unusual type of papular erythema having some characteristics of each of the morphologic groups of lupus erythematosus, erythema figuratum perstans and erythema elevatum diutinum, that cleared promptly after removal of foci of infection, although resistant beforehand to the usual methods of treatment including gold therapy. It seems to me that the evidence, particularly from American sources, points to a varied etiology in this group, in which, however, the streptococcus stands pre-eminent. My discussion will be limited to this group without considering those dermatoses in which the streptococcus is an accepted etiologic agent.

That this group is closely related, especially on morphologic grounds, is universally accepted. A differentiation between mild cases of pemphigus and bullous types of erythema multiforme is impossible in many cases on morphologic grounds. Transition forms exist, and the final diagnosis is determined only by the course and developments of the disease. Dermatitis herpetiformis and pemphigus are even more frequently indistinguishable. In fact the French speak of dermatitis herpetiformis (Dühring's disease) as pemphigus prurigeux. A common expression is that time only will differentiate between these three diseases; a fatal outcome indicating pemphigus and recovery or prolonged chronicity favoring erythema multiforme or Dühring's disease. Lupus erythematosus of the chronic discoid type could hardly be confused with pemphigus, erythema multiforme or Dühring's disease, although acute disseminated lupus erythematosus may be almost indistinguishable morphologically

from erythema multiforme. The recognition of the Senear-Usher syndrome, however, is a link quite definitely uniting lupus erythematosus with the pemphigus group. It would be a logical conception that the morphologic inter-relationship of this group could point to a common or at least a closely related etiology. Against this view steadily increasing evidence seemingly points to multiple etiological factors instead of a common cause. In combatting such a trend I shall now review the evidence in favor of the streptococcus as the etiologic agent in each of these diseases.

Lupus Erythematosus

Lupus erythematosus occurs in four main types; chronic discoid or fixed type; generalized discoid or chronic disseminate type; the subacute disseminated; and the acute disseminated types. The chronic discoid type is the more prevalent and runs a chronic course. The acute disseminated type may develop suddenly without previous manifestations, or be superimposed upon the chronic discoid variety. I agree with Veiel³² that all types of lupus erythematosus are various forms of the same disease, which differ only in the severity of the phenomena present.

There is no agreement as to the etiology of lupus erythematosus. French, Austrian and Scandinavian observers generally attribute the disease to tuberculosis, while in England the streptococcus is held to play a predominant rôle. American and German observers favor the theory of multiple etiological factors, with tuberculosis only as an occasional factor. Certainly in this country, at least, the incidence of tuberculosis in the chronic discoid type is little if any

†See page 348, "Among Our Contributors."

higher than that for the population as a whole, and our first consideration as an etiologic factor is towards focal infection.

Because of its acute, recurrent and fatal characteristics, available necropsy material, as well as its clinical course, so suggestive of an acute infectious process, this discussion of etiology will be limited to the acute disseminate type of lupus erythematosus. Of the many etiologic factors which have been mentioned I may name: pulmonary tuberculosis, tuberculous adenopathy, streptococci, sensitivity to light, toxic effects of drugs, injury to the superficial cutaneous blood vessels, focal infection, disease of the reticulo-endothelial system, and disease of the bone marrow as a partial list of incriminating factors. Undoubtedly many of these factors play a rôle, for instance sensitivity to sunlight is a frequent predisposing factor, but it is my aim to show that the streptococcus plays the dominant rôle.

Mook, Weiss and Bromberg,¹⁸ agree with MacLeod,¹⁴ and Keefer and Felty,⁹ that disseminate erythematous lupus is a toxic or a septic cutaneous symptom. Kiel¹⁰ is convinced on the basis of necropsy material from 125 cases that the occurrence of tuberculosis in cases of lupus erythematosus is coincidental and unrelated. The results of a recent questionnaire in Germany on the evidence for and against the tuberculous nature of lupus erythematosus,²⁸ stated that those that deny the tuberculous nature of lupus erythematosus far outnumber those who still affirm it. It is only fair to state, however, that Wise and Sultzberger in their editorial comments in the Year Book of Dermatology and Syphilis³⁶ repeatedly ascribe to the theory of multiple etiologic factors in the causation of lupus erythematosus.

The reports and discussions of late years in the American literature of such groups of cases of acute disseminate lupus erythematosus as reported by Madden,¹⁵ (nine cases—three autopsies) Mook, Weiss and Bromberg¹⁸ (thirteen cases—four autopsies) and O'Leary²⁰ (forty-seven cases) favored a focal infection (streptococcus) over the tuberculous etiology. Streptococci have been cultured from the blood stream in cases of lupus erythematosus as reported by Sibley and Wynn,²⁵ Low, Logan and Rutherford,¹² Semmario and Pessano,²⁴ Keefer and Felty,⁹ Madden¹⁵ and others. In Madden's cases

only one recovered, and that developed during an acute sinusitis and cleared following drainage. Templeton in the discussion of Madden's paper reported two cases of lupus erythematosus in which generalization occurred following extraction of abscessed teeth, although recovery followed the use of a vaccine made from the hemolytic streptococci recovered from the teeth or as Templeton suggested, "in spite of it." The association of acute lupus erythematosus disseminatus with arthritis has been reported at autopsy by Weidman,³³ and with neuritis by Ebert.⁷ The danger of interfering with foci of infection in these acute cases has been frequently attested to, but this would seem to further incriminate such foci rather than otherwise. As Stokes³⁰ so ably states it, "To my mind the victim of acute disseminate lupus erythematosus is first and foremost an allergic person explosively and furiously responsive to his infection and with a broken or inhibited leukocytic defense."

Another interesting group of cases are those presenting the lupus erythematosus like eruption of the Libman-Sacks syndrome which presents all the clinical manifestations of subacute lupus erythematosus disseminatus, plus an unusual type of endocarditis. This syndrome has been very carefully and worthily reviewed recently by Belote and Ratner.² They favored classifying it as erythema multiforme presenting a bacterial free phase of a previous sepsis, rather than a variant of subacute lupus erythematosus disseminatus. O'Leary²¹ in discussing this paper, stated:

"I have been unable to differentiate between the Libman-Sacks syndrome and subacute disseminate lupus erythematosus. The agglutination test (Welsh) which we have been doing in cases of subacute disseminate lupus erythematosus suggests that a streptococcus is the etiologic factor. I believe that subacute disseminate lupus erythematosus is of streptococcal origin, that the cutaneous picture it presents is varied, and that the complex which Libman and Sacks have described is but one of the several variants of it."

On such data and opinions I rest the case for the streptococcus in lupus erythematosus.

Pemphigus

My interest in the etiology of pemphigus dates to my work as an assistant to Eberson, in which he found a coccoid bacillus as a probable etiologic agent.⁶ This work was

not confirmed due, I believe, to failure in duplicating the technic until that recently carried out and enlarged upon by Welsh,³⁵ in which he found a pleomorphic organism which, I believe, to be the same as that described by Eberson. The diplococcus described by Pernet and by Bullock and Dunne, the micrococcus lanceolatus and the pseudo diphtheria bacillus of Hamburger and Rubell, as well as the coccus of Whiphouse¹ may all have been variants of this same organism. Led by the work of Rose now and by Mellon,¹⁶ we now accept a wide pleomorphism in the streptococcal series. Confirmation, I believe, will follow the accurate duplication of Welsh's work and the streptococcus or its toxins be accepted as the etiologic agent in pemphigus. I am not in position to pass upon the incrimination of an invisible filterable virus as the cause of pemphigus and dermatitis herpetiformis by Urbach and Wolfram.³¹ It certainly links these two diseases together to have an identical etiology. They admit that they have not duplicated the work of Welsh and with no further reason than my early work and interest I favor the latter's findings. The rather frequent occurrence of a type of pemphigus in meat handlers and its association with swine erysipelas should be recalled. However, as so ably stated by Wise and Sultzberger³⁷ there are many facets to the problem which are still to be solved. Why is pemphigus predominant among Hebrews while Duhring's disease affects people regardless of race, creed, or color? Why is genuine pemphigus non-existent in infants and children while Duhring's disease often attacks young people? These questions argue for the lack of relationship between these two diseases but do not refute our claim for a specific streptococcus as etiologic.

Dermatitis Herpetiformis

The question as to whether Duhring's disease and pemphigus should be classed as distinct and separate maladies is a moot one at the present time. One school championed by Bernhardt,³ J. Darrier,⁵ Wise and Sultzberger³⁸ and others state that the nosologic position of pemphigus is entirely different from that of dermatitis herpetiformis; that no transition forms can exist between diseases so different in nature and that when symptoms of the two diseases ap-

pear in one person it is coincidence. However, in answer to a questionnaire on "Are pemphigus and Duhring's disease sui generis or are there transition forms between them"?²² Grouven, Kumer, Linser, Nekham and Rille favored the view confirmed by Urbach's animal experiments that Duhring's dermatoses is a variant of chronic pemphigus, and that there are numerous transition forms in the literature. It is only fair to state that others feel that dermatitis herpetiformis is more closely related to chronic urticaria and is subject to the multiple etiologic factors of this disease. Focal infection has never been emphasized as the important etiologic factor in either pemphigus or Duhring's disease. It is discussed in this group largely on a basis of morphologic relationship, although as stated the work of Urbach linking the two etiologically and the incrimination of the streptococcus by Welsh in pemphigus as well as in dermatitis herpetiformis makes it belong logically in this consideration.

Erythema Nodosum

A voluminous literature has arisen in the past ten years over the etiology of erythema nodosum, with divided opinions between rheumatic, tubercular, multiple factors and a separate distinct infectious disease. I feel that the tubercular etiology has more evidence to support it, especially in children, than is warranted in lupus erythematosus. The purely rheumatic etiology has fewer adherents today than formerly. That many different factors may produce erythema nodosum must be accepted. I feel that Jadassohn⁸ expressed the problems in the erythema nodosum group so capably in a discussion before the American Dermatological Society at the time of his last American visit as to be well worthy of quotation here. He stated:

"I believe for the present that it is advisable to differentiate the secondary symptomatic group from the group with unknown causes. In the first group microbic or toxic substances may be the cause; for example, immune bodies, pyemia, tuberculosis, syphilis, gonorrhea, et cetera, but all of these cases are not really typical clinically. In typical cases we did not find the microbes, but I believe it is caused by an unknown specific organism. The same seems to be true for erythema multiforme which belongs to the group of dermatoses very similar to erythema nodosum."

In answer to a German symposium on, "Which of the proposed etiologies of

erythema nodosum is the most plausible?," Dittrich²⁹ states that many factors can give rise to the picture of erythema nodosum, with more and more secondary forms coming to light. As to the idiopathic form he thinks it has nothing to do with tuberculosis but is more closely related to skin rheumatoid.

The opinion that erythema nodosum is an independent disease having characteristics of an acute infectious fever is championed by the British (Symes,²⁷ Lendon,¹¹ Mitman,¹⁷ et al). This is favored because of numerous evidences of its communicability, incubation and prodromal periods, febrile reaction with leukocytosis, low blood pressure, cutaneous manifestations, convalescence with occasional relapses, and finally lasting immunity; all being features seen in acute infections. E. C. Rosenow²³ reported the cultivation of an organism in seven cases in 1915. The organisms were pleomorphic and could well fit into the group of streptococci as at present accepted. More recently Moon and Strauss¹⁹ (1932) have isolated a pleomorphic organism quite similar to that described by Rosenow. Even more recently (1934) Slot²⁶ has reported four cases of erythema nodosum in which the use of antistreptococcal (scarlatinal) serum has been followed by excellent and in one case spectacular results.

I believe, therefore, that the multiple factor theory can be accepted, but that those cases due to any one of a large number of accepted causes fall into the secondary symptomatic group. In the typical or primary cases the etiological agent is very probably the streptococcus described by Rosenow and confirmed by Moon and Strauss.

Erythema Multiforme

Erythema multiforme is very closely related to the pemphigus, dermatitis herpetiformis and erythema nodosum groups. It is also closely related by way of the acute and subacute disseminated types to lupus erythematosus. The remarks of Jadasohn on erythema nodosum apply with equal force to erythema multiforme. The secondary symptomatic group may be due to many varied infectious and toxic agents. In typical primary cases, however, I believe that the streptococcus plays at least the dominant rôle.

McEwen¹³ has reported a fatal case in which *Streptococcus viridans* was cultivated from the tonsils and the blood stream. In the discussion of this paper Guy reported an interesting experience with forty-seven cases in a war time camp. These cases cleared but promptly recurred. *Streptococcus viridans* was found almost in pure culture deep in the tonsils. On the removal of the tonsils in these cases they were much gratified to find that recurrence of attacks of erythema multiforme ceased. The importance of focal infection in typical recurrent cases of erythema multiforme is well recognized, as well as its relationship to rheumatism, purpura rheumatica and Henoch's purpura.

Erythema Elevatum Diutinum

Weidman and Besancon³⁴ have quite fearlessly placed erythema elevatum diutinum in the rheumatoid or more specifically streptococcal group of diseases. They say:

"The effect of rheumatism together with other focal infectious states extend to the skin in the form of other expressions than the widely known rheumatic nodules; that is, Haverhill's disease, panniculitis, dermatomyositis, erythema nodosum and erythema elevatum diutinum. Erythema elevatum diutinum is an entity, distinctive clinically and histologically; it should attract attention to internal infectious states. When this condition is typical it is so distinctive that rheumatism can be identified in the case simply on the basis of the cutaneous symptoms without reference to the medical history in the case. *Streptococcus ignavus* was isolated from one of our cases and should be remembered as one of the primary exciting organisms."

Comment

Whether the streptococcus will ever be accepted as the dominant organism in the etiology of this group of diseases remains to be proven. I feel that such a search for a common etiologic agent, differing only as to the strain or group of strains of the organism concerned, is a step in the right direction rather than the ready acceptance of multiple causes. The paper of Welsh deals with much more than the etiology of pemphigus. Without giving details as to the origin of his cultures, he states that the cataphoretic mobility reducing action of serums from patients with pemphigus, dermatitis herpetiformis, lupus erythematosus and erythema multiforme on their respective pooled strains of streptococci was found to be so specific that he has applied this action as a differential diagnostic test. Longer experience has, I believe, even further im-

pressed the Department of Dermatology at the Mayo Clinic as to the invaluable aid of this differential diagnostic test in these diseases.

Another mode of approach to such a relationship is available through the bacterial complement fixation tests of Burbank and Hadjapoulos⁴ who have applied them particularly to the relationship of streptococci to arthritis. Time does not permit a technical discussion of their methods. Such tests may be run with the patient's serum against various stock strains of hemolytic, viridans and non-hemolytic streptococci, or checked further against those organisms recovered by culture from foci of infection in the individual patient. I have used this method in so few cases that my results are not worthy of recording, except to state that it offers a promising field for further investigation.

Finally, it would seem to me that more effort should be made to work out some logical method of therapy based on such an infectious etiology. In Eberson's work with pemphigus we tried to immunize horses and monkeys against this organism and then give such supposedly immune serum to patients. Such procedures failed in our hands. The possibility of the development of specific immune streptococcus serums should be worthy of consideration or the use of serums from patients recovering from these diseases. The use of antistreptococcal serum in the treatment of erythema nodosum already referred to by Slot is, I feel, such a laudable effort. The probability that the cutaneous manifestations are of purely allergic nature secondary to a localized focus of infection rather than an embolic septicemic process, with the possible exception of pemphigus and erythema nodosum, should of course alter our efforts. A study of the value of vaccine therapy as used by Templeton and already referred to seems to be another step in the right direction. That such interest is already manifesting itself among dermatologists is proven by the September, 1936, number of the *Archives of Dermatology and Syphilology*, containing articles entitled "Focal Infection in Dermatology" and "Allergic Bacterial Dermatoses; Their Diagnosis and Treatment with Autogenous Vaccine." The recent developments of vaccine therapy in arthritis using extremely small doses (1-10

organisms) may alter the rather unfavorable status, at present, of such therapy. It is certainly indicated to make at least a thorough investigation for foci of infection in this group of cases since permanent cures have in many instances followed only after their removal; bearing in mind the explosive sensitivity of cases of disseminate lupus erythematosus. I believe that we are on the threshold of important discoveries through the use of antistreptococcal serums and vaccines in these diseases.

Summary

1. Lupus erythematosus, pemphigus, dermatitis herpetiformis, erythema multiforme and erythema nodosum are very closely related morphologically.

2. Clinical and laboratory evidence is presented to prove that streptococci of probably different but specific strains are at least the dominant etiologic agents for the entire group.

3. A plea for a therapeutic attack by removal of foci of infection, plus an effort to develop specific antistreptococcal serums and vaccines, as a means of producing or increasing immunity in this group of diseases is made.

Bibliography

1. Beinhauer, L. G.: Etiology and pathogenesis of pemphigus. *Penn. Med. Jour.*, 37:95 (November) 1933.
2. Belote and Ratner: The so-called Libman-Sacks syndrome; its relation to dermatology. *Arch. Dermat. and Syph.*, 33:642, (April) 1936.
3. Bernhardt, R.: Etiology of pemphigus and Duhring's disease. *Arch. f. Dermat. u. Syph.*, 171:536, (May 31), 1935.
4. Burbank, R. and Hadjopoulos, L. G.: Serologic significance of streptococci in arthritis and allied conditions. *Jour. A. M. A.*, 84:637, (Feb. 28) 1925. Also *Jour. Bone and Joint Surg.*, 9:278 (April) 1927 and *Jour. Lab. and Clin. Med.*, 15:30, (October) 1929.
5. Darier, J. and Tzanck, A.: Pemphigus and dermatitis herpetiformis and the so-called transition cases. *Dermat. Wehnschr.*, 100:73, (Jan. 19) 1935.
6. Eberson, F.: Studies on the etiology of pemphigus; bacteriologic findings in a group of cases of pemphigus. *Arch. Dermat. and Syph.*, 8:204, (August) 1923.
7. Ebert, M. H.: Discussion of paper on lupus erythematosus by Madden (Ref. 15.)
8. Jadassohn, J.: Discussion of paper on erythema elevatum diutinum by Weidman and Besancon (Ref. 34). *Arch. Dermat. and Syph.*, 20:619 (November) 1929.
9. Keefer and Peltz: Acute disseminated lupus erythematosus; report of three fatal cases. *Bull. Johns Hopkins Hosp.*, 35:294, 1924.
10. Kiel, H.: Lupus erythematosus and tuberculosis. *Arch. Dermat. and Syph.*, 28:765, (December) 1933.
11. Lendon: *Brit. Med. Jour.*, 1:165 and 651, 1925.
12. Low, Logan and Rutherford: A fatal case of lupus erythematosus with post mortem. *Brit. Jour. Dermat.*, 32:253, 1926.
13. McEwen, E. L.: Erythema multiforme; report of a case with necropsy findings and deductions. *Arch. Dermat. and Syph.*, 13:331, (March) 1926.
14. MacLeod, J. M. H.: Lupus erythematosus. *Arch. Dermat. and Syph.*, 9:1, (January) 1924.
15. Madden, J. F.: Acute disseminated lupus erythematosus. *Arch. Dermat. and Syph.*, 25:854, (May) 1932.
16. Mellon, R. R.: Study of the diphtheroid group of organisms with special reference to its relation to the streptococci. *Jour. Bact.*, 2:269, (May) 1917.
17. Mitman: *Lancet*, 2:751, 1927.
18. Mook, W. H., Weiss, R. S., and Bromberg, L. K.:

- Lupus erythematosus disseminatus. Arch. Dermat. and Syph., 24:786, (November) 1931.
19. Moon, H. V., and Strauss, A.: Erythema nodosum; character and etiology. Arch. Dermat. and Syph., 26:186 (July) 1932.
 20. O'Leary, P. A.: Disseminate lupus erythematosus. Minn. Med., 17:634, (November) 1934.
 21. O'Leary, P. A.: Discussion of paper on Libman-Sacks syndrome by Belote and Ratner (Ref. 2).
 22. Questionnaire: Are Duhring's disease and pemphigus sui generis or are there transitions between the two? Replies to a questionnaire. Dermat. Wchnschr., 99:1084, (Aug. 18) 1934.
 23. Rosenow, E. C.: The etiology and experimental production of erythema nodosum. Jour. Infect. Dis., 16:367, (May) 1915.
 24. Semmario and Pessano: Acute lupus erythematosus: four cases. Semana Med., 2:721, (September) 1930.
 25. Sibley and Wynn: Fatal case of lupus erythematosus disseminatus. Brit. Jour. Dermat., 29:323 (August-September) 1923.
 26. Slot, G.: Erythema nodosum treated with antistreptococcal serum. Lancet, 2:600, (Sept. 15) 1934.
 27. Symes, J. O.: Brit. Med. Jour., 2:741, 1921. Lancet, 2:1033, 1929.
 28. Symposium (various authors): Arguments for and against the tuberculous nature of lupus erythematosus. Dermat. Wchnschr., 99:1346, (October) 1934.
 29. Symposium (various authors): Most probable etiology of erythema nodosum. Dermat. Wchnschr., 98:624, (May) 1934.
 30. Stokes, J. H.: Discussion of paper on lupus erythematosus by Madden (Ref. 15).
 31. Urbach, E., and Wolfram, S.: The virus of pemphigus and dermatitis herpetiformis. Arch. Dermat. and Syph., 33:788, (May) 1936.
 32. Veiel, F.: Lupus erythematosus acutus. Handbuch der Haut und Geschlechtskrankheiten by J. Jadassohn. 10:pt. 1, 705. Berlin: Julius Springer, 1931.
 33. Weidman, F. D.: Discussion of paper on lupus erythematosus by Mook, Weiss and Bromberg (Ref. 18).
 34. Weidman, F. D., and Besancon J. H.: Erythema elevatum diutinum: rôle of streptococci and relationship to other rheumatic dermatoses. Arch. Dermat. and Syph., 20:593, (November) 1929.
 35. Welsh, A. L.: Specificity of a streptococcus isolated from patients with pemphigus. Arch. and Syph., 30:611, (November) 1934.
 36. Wise and Sultzberger: Editorial comments. Year Book of Dermatology and Syphilis. Chicago: Year Book Publishers, 1933, 1934, 1935.
 37. Wise and Sultzberger: Editorial comment. Year Book of Dermatology and Syphilis, p. 596. Chicago: Year Book Publishers, 1935.
 38. Wise and Sultzberger: Editorial comment. Year Book of Dermatology and Syphilis, p. 210. Chicago: Year Book Publishers, 1935.

Discussion

DR. UDO J. WILE (Ann Arbor, Mich.): Dr. Shaffer's presentation seems to me to be very timely. It establishes an attempt at least for us to bring some form of coördination in a group of diseases, some of which are morphologically similar, and all of which up to now are entirely obscure as to their exact etiologic factors.

Time does not permit me to enter into a minute discussion of all of the points which have been covered. I should like to confine my remarks particularly to the question of pemphigus and disseminated lupus erythematosus, inasmuch as both of these seem to me to present for the present the least convincing evidence of any determined etiologic agent.

I listened with the greatest degree of interest to the presentation a couple of years ago from the Mayo

Clinic of a proved etiologic agent for pemphigus. The work appeared to be conclusive and to have been well controlled. However, I am still at this time unconvinced as to the infectious etiology of the disease. It is difficult for me to accept pemphigus as an infection: first, because of its entire sporadic nature; second, because of its racial distribution; and most important, because of its clinical and morphological characteristics, its microscopic picture, none of which conform to the picture of an infectious disease.

For this reason, therefore, I agree entirely with the view which separates pemphigus very definitely from dermatitis herpetiformis. The latter is so very definitely either a toxic or septic process, not infrequently relating to a focus of infection, and so definitely a variegated pleomorphic picture, that it is only an occasional form which resembles pemphigus.

If we accept the broad concept of multiform erythema to include on the one hand septic erythemas and on the other toxic erythemas, we can with readiness place dermatitis herpetiformis in the group of the multiform erythemas. Pemphigus does not so easily allow itself to be so placed. There is still some evidence to suggest a trophic or neurological basis for this disease, and continued confirmation of Welsh's work will be necessary before pemphigus may be accepted as a specific infection.

I hold similar views with regard to the separation of simple discoid lupus erythematosus from the acute disseminated form. Of the two diseases the simpler, that is the erythematosus lupus of the discoid variety, is much the more puzzling since there are no established etiologic factors for this disease. The disseminated form, I think, has, as Dr. Shaffer has pointed out, multiple etiologic factors, all of which in my opinion, are one form of sepsis or another, and in this group, undoubtedly, the streptococci play the major established rôle. However, it must not be overlooked that the tubercle bacillus, and without doubt other organisms, may produce this rapid fulminating disease which from all standpoints clearly points to infection in every case.

It is really unfortunate that the name lupus erythematosus has become associated with this entity. There is immediately an implied connection between the two diseases and this implication is very frequently not borne out by the dissimilarity of the two diseases. We must remember that the skin reacts in a particular way to various insults and a close morphologic similarity often misleads us into the belief of a common etiology. There is, of course, no relation between the pustular syphilid and variola, and yet the two are so nearly alike that differentiation is frequently difficult. This analogy could be carried out indefinitely and in my opinion it applies with equal force to pemphigus and dermatitis herpetiformis on the one hand and to lupus erythematosus and lupus erythematosus disseminatus on the other, diseases with nothing in common except morphologic similarity.

RHEUMATISM IN CHILDHOOD: ITS RECOGNITION AND TREATMENT*

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Rheumatism affects approximately 1 to 3 per cent of school children in large centers. Such figures, in spite of our clear understanding of the disease, indicate that more is to be learned before effective preventive therapy can be instituted. However, much can be done to modify the course of the disease by intelligent care. It is my purpose in this communication to discuss particularly some of the recent advances in the management of the rheumatic state in childhood, touching upon diagnostic features insofar as they are pertinent to a better understanding of the treatment.

Rheumatism in children manifests itself in different forms. Commonly, growing pains, arthritis and chorea, with or without heart involvement, represent the rheumatic state, but other manifestations, more vague in their interpretation, may complicate the clinical picture. These will be referred to later. Growing pains are often regarded too lightly and are attributed to rapid growth. This attitude is unjustifiable and untenable. Normal growth does not cause pain. Fleeting pains in the legs due to muscle fatigue or poor body mechanics may be confusing but rheumatic pains can be differentiated from these by the fact that they are also likely to be present in the arms, have no particular relationship to exercise and although most commonly present at night can occur at any time during the day. In case of doubt, it is better to err on the safe side and treat the child as rheumatic until proven otherwise. Wise sojournment in bed while the pain is present with adequate doses of acetyl salicylic acid will amply reward the physician for his keen foresight and the patient for the forced stay in bed. By doing this the infection may be stemmed in its infancy. At least 80 per cent and possibly more of all cases of rheumatic infection have some heart involvement arising during a first or subsequent attack. Early cardiac disease can be missed by the usual bedside examination and may be discovered only by special studies such as the electrocardiogram and orthodiagram offer us. Therefore to disregard the fleeting rheumatic pains and wait for more definite clinical evidence of rheumatic heart disease, is

to wait too long. To procrastinate in the treatment of what at the time may seem mild and insignificant may in the end lead to irreparable damage and invalidism.

Rheumatic arthritis in children is sometimes overlooked for it is rarely as severe as in adults, the extreme pain, redness, heat, and swelling often being absent. The joint pains may be so mild as not to greatly incapacitate the child who, fearful of being put to bed and given some "distasteful medicine" to take, will not disclose the nature of his illness to his parents. The first indication that anything is wrong is often detected by the presence of a limping gait. The treatment of such a case is rather simple. Absolute bed rest is essential, maintaining it until all the manifestations of rheumatic fever subside, and then for two or three weeks longer, for additional safety. If during the course of this illness, there is evidence pointing to cardiac infection, the bed rest should be prolonged. For many years, clinicians have used acetyl salicylic acid, regarding it as more or less specific for arthritis of rheumatic origin. This practice is still adhered to and by some is even considered to be of diagnostic value. The amount of salicylates used will vary with each case but enough must be given to procure relief from the pain and fever. This often requires about 5 grams a day. If sodium bicarbonate is given along with it in about equal amounts, gastric symptoms may be averted. Kaiser⁵ has recently suggested the combination of magnesium oxide and acetyl salicylic acid finding this combination more effective than acetyl salicylic acid alone. The magnesium oxide acts synergistically and guards against salicylate intoxication. After the arthritis has completely

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†See page 348, "Among Our Contributors."

subsided, the salicylates may be discontinued or else the dose reduced and continued for another two to three weeks or even longer. If salicylates are not tolerated by mouth, they can be administered rectally, giving the entire dose at one time as a retention enema.

Sydenham's chorea is considered by many as a manifestation of rheumatic infection. Not every one is in agreement with this view but I will not discuss the many controversial opinions expressed. In a recent survey of 482 cases of chorea, followed over a period of eight years, Jones and Bland⁴ observed that the incidence of rheumatic heart disease was only 3 per cent, where chorea alone was present, but 73 per cent where rheumatic fever subsequently developed. For the entire group, the incidence of cardiac involvement was 54 per cent. Such figures intimate at least that chorea by itself is not so frequently the cause of rheumatic heart disease as was formerly believed, except where rheumatic fever is present or subsequently develops. It cannot be denied that there is a close inter-relationship between chorea and other rheumatic infections, even if both are not caused by the same organism. It may be that the individual is a constitutional type which falls a victim to both chorea and rheumatic fever. For the time being, until the question is definitely settled, one should consider chorea as a rheumatic infection and direct treatment towards the prevention of possible cardiac complications.

I should like to stress the importance of differentiating chorea from habit spasm, tic, and other nervous disorders. Sometimes the differential diagnosis is taxing but rests essentially upon the insidious onset of purposeless arrhythmical coarse movements of the body, tremor of the tongue, dysarthria and ataxia of the extremities. Pseudoparalysis of the hemiplegic type may be present. Once the diagnosis is established, treatment consists essentially of bed rest and sedation, which should be maintained until all the symptoms subside. Under such a regime the child will be well usually within four to six weeks. If bed rest is not insisted upon, it may linger for months, becoming progressively worse. It is not necessary to keep the patient in a dark room, in fact, a sunny, cheery room is advantageous, but absolute quietness is important. To ob-

tain mental and physical relaxation the bromides and barbiturates are usually quite effective. Nirvinol or phenylethyl hydantoin if used at all should be given cautiously. It is quite toxic and a few deaths from its use have been reported. For many years arsenic has been used. Its mode of action on chorea is not exactly known, but it is thought to have some effect on the central nervous system. Calcium, in rather large doses, 3 to 4 grams daily, may be of value in decreasing the neuromuscular irritability. In our clinic we have had singular success with foreign protein therapy, using typhoid paratyphoid vaccine intravenously starting with 50 to 100 M. bacilli undiluted, and increasing the dose daily up to 1000 M. of typhoid bacilli and 750,000 of paratyphoid bacilli. The course consists of ten to fifteen daily injections and is repeated after a week of rest if the symptoms persist. In the majority of our cases it has considerably lessened the hospital stay and in some instances the patients were without symptoms even before the first course was completed. Sutton⁹ of New York has been the principal exponent of the Typhoid-Paratyphoid vaccine therapy in chorea and recently has used this treatment in acute rheumatic carditis with good results. We have had no experience with its use in rheumatic heart disease and on the contrary have felt that it would be a rather dangerous procedure in such cases.

As soon as the chorea has subsided the child may be allowed out of bed and to return to normal activities gradually. It is a good plan to keep him out of school for at least a month after he is completely well. Good food, regular hours, and freedom from excitement, worry and overwork both in and out of school will go a long way in preventing recurrences which are rather frequent. The foci of infection such as diseased tonsils, teeth, and infected sinuses should receive the proper care.

In rheumatic heart disease, the treatment depends on the degree of compensation and infection. Because of the frequency with which apical systolic cardiac murmurs are encountered which are not organic in origin it is wise to be not too hasty in diagnosing every heart in which a murmur is heard as rheumatic. Other signs such as cardiac enlargement and electrocardiographic changes point to the murmur as being organic in origin except in acute febrile diseases where

dilatation of the heart will give rise to murmurs which will, however, disappear with the subsidence of the infection and return of the heart to normal size. Congenital heart abnormalities need not be discussed here but their differentiation from rheumatic heart disease is as a rule not troublesome. The difficulty in accurately appraising the cardiac status arises when an apical systolic murmur is present without any other evidence of cardiac disease. A history of preceding rheumatic infection is helpful. When in doubt it is advisable to watch closely such a child over a period of time, for further evidence of rheumatism. Activities need not be limited and the youngster should be encouraged to lead as normal a life as possible. Sometimes when dealing with neurotic parents and a neuropathic child, it is advantageous not to disclose the presence of any cardiac abnormality until it is definitely proven to be organic. Children are highly susceptible to suggestion which frequently undermines both their physical and mental health. Moreover a diagnosis of heart disease even if disproven later stigmatizes the child for many years, even as would an erroneous diagnosis of tuberculosis or syphilis.

Our next concern is for the boy or girl who has active rheumatic infection of the heart. For decompensation semi-Fowler's position in bed with a suitable back rest is very comforting, relieving much of the dyspnoea. Cyanosis may be combated by oxygen, which is also beneficial to the heart muscle. Digitalis is definitely indicated if cardiac insufficiency is present. It has been claimed that this drug is harmful in acute rheumatic carditis, but there is no pharmacological basis for such an assumption. If electrocardiograms are taken before and during digitalis therapy, any abnormalities in cardiac rhythm arising from its use may be detected early. For instance with a prolonged P-R, interval digitalis would be used with caution keeping in mind the possibility of heart block. Inverted T waves arising during the course of treatment would indicate that about two-thirds of the maximum dose has already been given and would serve as a guide where other means fail to give warning of impending digitalis intoxication.

The Eggleston cat unit method for digitalization may be employed or the dosage

may be gauged by the physiological results using one grain of the leaf every 6 to 8 hours until digitalization is obtained and then a maintenance dose as long as necessary. Children tolerate digitalis much better than do adults and also require more proportionately. Some are refractory to this drug and nothing is gained by being persistent in its use. Next to digitalis in importance is sedation. The barbiturate group of drugs or codeine may suffice but where these do not give adequate relaxation, morphine may be given. Indeed, its use should not be spared for it creates such mental and physical relaxation as cannot be attained by other drugs. Addiction is not very likely to occur in children, in the dosage administered. The edema is combated by promoting diuresis, purgation, and dehydration. The fluid and salt intake is limited and hypertonic solution of glucose may be given intravenously. Digitalis itself often causes marked diuresis by improving the circulation. The ascites, pleural and pericardial effusions will usually clear up spontaneously but occasionally the fluid has to be removed mechanically where it causes distressing symptoms. Acetyl salicylic acid is of value where joint pain or fever is present. It is very doubtful if it has any healing effect upon the heart. The diet should be light and nutritious being relatively high in carbohydrate and protein and rich in vitamins, particularly vitamin C. In the light of recent work⁵ on animals, vitamin C deficiency may play an important role in the development of rheumatic lesions. In guinea pigs given an adequate diet, infection does not cause any marked changes in the heart valves whereas in those deprived of vitamin C, infection results in degenerative and proliferative changes in the valves of the heart very similar to those observed in rheumatic heart disease. Such results suggest that vitamin C bears a significant causal relationship to rheumatism, although no deficiency in the cevitic acid content has been found in the blood, urine and tonsils of rheumatic children as compared to the normal.⁶ Anemia is invariably present in the majority of cases, particularly those of long standing, and should be corrected by adequate amounts of reduced iron or other iron preparations. Addition of liver to the diet will stimulate erythropoiesis. Frequent small blood transfusions, aside from correcting

the anemia, may also supply specific antibodies increasing the resistance to the rheumatic infection.

On the basis that glucose may improve the heart's nutrition we have been giving 15 to 20 per cent solution of dextrose intravenously daily or every other day. The benefit derived from such a procedure is difficult to evaluate but at least it does no harm. It does seem to relieve the acute abdominal pain and vomiting so frequently associated with acute pericarditis.

Vaccines and sera have been used to overcome the infection but as yet the results do not warrant their general acceptance. Although the weight of opinion is in favor of a streptococcus sensitization of tissue as the cause of rheumatic fever attempts at desensitizing or producing immunity by streptococcus vaccines have been quite disappointing. In fact, as Coburn¹ and his associates have so clearly shown, this may only increase the susceptibility of the tissues to further rheumatic infection even though the antistreptolysin titer in the blood is increased.

After the infection has been successfully combated, thought may be given to allowing the patient out of bed. The decision will be based on the degree of cardiac embarrassment, pulse rate, temperature, blood pressure, anemia, leukocytosis and sedimentation rate. Dyspnoea on slight exertion points to myocardial insufficiency and warrants further bed rest. The temperature should not be higher than 99 degrees F. orally with the maximum variation less than 1.5 degrees during the day, and the pulse regular and not over 100 per minute. In easily excitable children, the pulse rate during the day is often higher than normal but if it drops to a normal rate during sleep, it is of no significance. It is desirable that the blood pressure be normal and the pulse pressure not over 50 mm/Hg. Progressive anemia, leukocytosis and an increased sedimentation rate of the erythrocytes (in the absence of other contributing causes) also suggest that the disease is not completely checked. In addition epistaxis, hematuria, erythema nodosum or multiforme, purpura, and rheumatic nodules indicate activity. Residual subclinical infection can easily be overlooked unless all possible evidence is closely scrutinized.

To be doubly sure of preventing exacer-

bations bed rest should be continued for a period of at least six to eight weeks even after all clinical and laboratory examinations are negative. In our clinic we have placed considerable reliance on the sedimentation rate feeling that is a very sensitive indicator of the presence or absence of infection. In appraising it care must be taken to make corrections for the anemia or else the result is unreliable. In the absence of any other obvious cause for a rapid sedimentation rate, we assume that rheumatic infection is still present, and do not permit the child out of bed till it has dropped to normal. Where cardiac insufficiency is due solely to mechanical factors the sedimentation rate may be normal. In such a case the course to be followed is primarily governed by the patient's general condition. If there is danger of psychoneurosis developing, it will be necessary to shorten the period of confinement to bed. Mental invalidism incapacitates the child even more than chronic rheumatism and should be prevented even at the cost of further damaging the heart.

During convalescence the cardiac balance is regained and compensation is established. Graduated exercises always within cardiac tolerance, as measured by the degree of dyspnoea, are prescribed. An older child can be taken into the physician's confidence and made to understand why he should be careful not to overstep the amount of work he is capable of doing with safety. He can be made to appreciate that regaining his health depends entirely upon himself, and that moderate shortness of breath is a signal for rest, discontinuing all activities. Such intelligent coöperation will yield far better results than having someone supervise his play and dictate as to what he can or cannot do. Of course a younger child will require rather close guidance until he can learn a sense of responsibility. One must be on the watch at all times for signs of reactivity. The state of nutrition is an excellent guide of the child's progress, a failure to gain weight often being evidence of re-infection. In the presence of any supervening infection the heart must be watched closely, and bed rest enforced for a longer period, than in a non-rheumatic child.

The matter of removing questionable foci of infection, particularly tonsils, is probably overemphasized. If the tonsils are diseased they should be removed, but many are be-

ing taken out indiscriminately. Such a practice has not decreased the incidence of cardiac re-infection since the frequency of remissions in tonsillectomized cases is just as great as in the non-tonsillectomized. Nevertheless the clinical improvement that follows the removal of diseased tonsils is so marked that it seems to be justified in every case. If the heart is yet unaffected it does seem to lessen the incidence of cardiac involvement. The optimum time for tonsillectomy is during convalescence, after an afebrile period of at least two weeks with a normal pulse rate. It is advisable to give salicylates preceding and for about two weeks following tonsillectomy. Too early surgical intervention may precipitate an acute flare up of the rheumatic infection and instances are on record where death resulted. This is not so remarkable in view of the bacteremia which not infrequently follows removal of tonsils and teeth. This does not seem to occur after abdominal surgery so that appendectomies and such like measures may be carried out with impunity even though the rheumatic infection is active. It is of course understood that any surgical procedure unless urgent should preferably be postponed till convalescence is established. There are times when the rheumatic infection is resistant to any form of conservative treatment and it becomes necessary to remove the foci of infection during the active phase of the disease.

The physician's responsibility to the child does not end with the completion of convalescence. Dangerous years still are ahead and unless he is carefully guided may succumb at an early age or else become an invalid for the remaining years of his life. A certain number of these children will die early no matter what is done for them. According to Coombs³ 5.1 per cent die the first year after the initial onset; 11.2 per cent within five years, and 21.4 per cent within ten years. Approximately 50 per cent will have died by the time they reach forty years; 30 to 35 per cent become completely well, showing normal hearts which defy detection of any previous injury. The rest become invalids. Morse⁷ in reviewing 100 cases which he had followed from ten to thirty years found that 37 per cent were cured, having normal hearts, and that 36 per cent had died. Some of those whom he had previously considered as advanced cases

to his surprise lost all signs of cardiac disease and were now outstanding athletes. The prognosis of rheumatic heart disease in children is therefore relatively good and only becomes poorer with each recurrent attack. The hope lies in saving the lives of the 35 per cent who if neglected would not be so fortunate, and in making the lives of those who are invalids more happy and fruitful. If the rheumatic child is to be given the fullest chance for recovery he must be guarded from infection, fatigue, exposure to cold, worry, anxiety and overwork. Bad housing, overcrowding, noisy environment, insufficient food, and lack of outdoor play are deleterious factors which should be controlled. A change of climate if financial conditions permit, is highly desirable, choosing the warm Southern States or else such zones as Puerto Rico, Cuba and Bermuda. Patients with rheumatism have been known to be entirely well while in Puerto Rico only to suffer a relapse on returning to the United States. For those showing dyspnoea and considerable cardiac damage, it is best not to choose an altitude higher than 3,000 feet above sea level. Remissions are notorious for their insidious onset. Anemia, loss of appetite, and weight, tiredness, low grade fever, dyspnoea on slight exertion, and vague joint pains are ominous signs. Whenever any of these are encountered, a careful investigation should be instituted. A rapid sedimentation rate of the blood cells may precede by days an impending exacerbation of the rheumatic infection and where the other signs are vague or the information obtained conflicting it is of decided value.

Cardiac camps and convalescent homes serve an invaluable function in guiding under expert supervision the lives of many children who would otherwise receive inadequate care. Many of us realize that rheumatism must be challenged in very much the same manner as tuberculosis and yet the facilities for taking care of the former are not as adequate. There should be sanatoriums for caring for rheumatic children just as there are sanatoriums for the tuberculous children. Surely the results that may be looked for in salvaging many lives repay the extra expense and efforts.

In concluding I would like to stress that rheumatism is essentially a disease of childhood. Its diagnosis in the early stages is

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Kessler, Harold.....Alpena
Lister, George F.....Hillman
MacKinnon, A. C.....Atlanta

McKelvey, E. W.....Oscoda
Miller, A. R.....Harrisville
Moffat, Gordon B.....Rogers City
Monroe, Neil.....Rogers City
Nesbitt, Wm. E.....Alpena
Newton, Wm. B.....Alpena

O'Donnell, F. J.....Alpena
Parmenter, E. S.....Alpena
Purdy, John W.....Long Rapids
Rutledge, S. H.....Rogers City
Secrist, Leo F.....Alpena
White, J. A.....Alpena

BARRY COUNTY

Cobb, Thomas H.....Woodland
Finnie, R. G.....Hastings
Fisher, Gordon F.....Hastings
Gwinn, A. B.....Hastings
Harkness, Robert B.....Hastings

Heney, M. Alice.....Hastings
Keller, Guy C.....Hastings
Lathrop, Clarence P.....Hastings
Lofdahl, Stewart.....Nashville
Lund, Chester A. E.....Middleville

McIntyre, C. S.....Hastings
McIntyre, K. S.....Hastings
Morris, Edgar T.....Nashville
Swift, B. C.....Middleville
Wedel, H. S.....Freeport

BAY-ARENAC-IOSCO-GLADWIN COUNTIES

Allen, A. D.....Bay City
Asline, J. N.....Bay City
Austin, Justis.....Tawas City
Baker, Chas. H.....Bay City
Ballard, Sylvester L.....Bay City
Ballard, W. R.....Bay City
Berman, Harry.....Omer
Boulton, A. O. (Emeritus).....Gladwin
Bristow, J. H.....Bay City
Brown, G. M.....Bay City
Chapman, E. J.....Bay City
Criswell, R. H.....Bay City
Dickinson, John W.....Oscoda
Drummond, Fred.....Kawkawlin
Dumond, V. H.....Bay City
Ely, Nina.....Bay City
Foster, L. Fernald.....Bay City
Freel, John A.....Bay City
Gamble, Jr., W. G.....Bay City
Groomes, Charles.....Bay City
Grosjean, J. C.....Bay City
Gunn, Robert.....Standish
Gustin, J. W.....Bay City
Hagleshaw, G. L.....Bay City

Hand, Eugene.....Saginaw
Hasty, Earl.....Whittemore
Hauxhurst, J. W.....Bay City
Healy, Gaillard H.....Bay City
Hess, C. L.....Bay City
Horowitz, S. Franklin.....Bay City
Huckins, E. S.....Bay City
Hughes, E. C.....Bay City
Husted, F. Pitkin.....Bay City
Jacob, A. H.....Bay City
Jens, Otto.....Essexville
Jones, Jerry M.....Bay City
Kerr, Wm.....Bay City
Kessler, Mana.....Bay City
Kessler, S.....Bay City
Kowals, F. V.....Bay City
LaPorte, L. A.....Gladwin
Leininger, J. W. (Emeritus).....Gladwin
McCarroll, James C.....Bay City
McDowell, Guy Marshall.....Howell
McEwan, J. H.....Bay City
Medvesky, M. J.....Bay City
Miller, Maurice C.....Auburn
Mitton, O. W.....East Tawas

Moore, George W.....Bay City
Moore, Neal R.....Bay City
Mosier, D. J.....Bay City
Perkins, Roy C.....Bay City
Petty, J. R.....Au Gres
Reutter, C. W.....Bay City
Scrafford, Royston Earl.....Bay City
Sherman, R. N.....Bay City
Slattery, M. R.....Bay City
Speckhard, A. O.....Bay City
Stinson, W. S.....Bay City
Swantek, Charles M.....Bay City
Sweet, I. C.....Sterling
Tarter, Clyde.....Bay City
Thiehoff, E. V.....Gladwin
Tupper, Virgil L.....Bay City
Urmston, Paul R.....Bay City
Warren, E. C.....Bay City
Weed, John.....Tawas City
Wilcox, J. W.....Bay City
Wilson, Thomas G.....Bay City
Wittwer, E. A.....Bay City
Ziliak, A. L.....Bay City

BERRIEN COUNTY

Allen, J. U.....Benton Harbor
Allen, Robert C.....St. Joseph
Anderson, A. J.....New Buffalo
Bliesmer, A. F.....St. Joseph
Brown, F. W.....Watervliet
Burrell, H. J.....Benton Harbor
Cawthorne, H. J.....Benton Harbor
Colef, Irving.....Benton Harbor
Conybeare, R. C.....Benton Harbor
Dunnington, R. N.....Benton Harbor
Ellet, W. C.....Benton Harbor
Emery, Clayton.....St. Joseph
Fredrickson, H. C.....Buchanan

Gillette, Clarence H.....Niles
Hart, Russel T.....Niles
Harrison, L. L.....Niles
Helkie, William L.....Three Oaks
Henderson, Fred.....Niles
Henderson, Robert.....Niles
Hershey, Noel J.....Niles
Higbee, Frank O.....Three Oaks
Herring, Nathaniel A.....Niles
Ingelright, Leon R.....Niles
Keppen, Ford.....Three Oaks
Kok, Harry.....Benton Harbor
Kotler, M. J.....Coloma

Littlejohn, Wm.....Bridgman
McDermott, J. J.....St. Joseph
Merritt, Charles W.....St. Joseph
Miller, E. A.....Berrien Springs
Mitchell, Carl A.....Benton Harbor
Reagan, Robert.....Benton Harbor
Richmond, D. M.....St. Joseph
Simpson, Loleta E.....Berrien Springs
Smith, W. A.....Berrien Springs
Sonnemann, C. O.....St. Joseph
Strayer, J. C.....Buchanan
Therup, D. W.....Benton Harbor
Westervelt, H. O.....Benton Harbor

BRANCH COUNTY

Aldrich, Napier.....Coldwater
Beck, Perry C.....Bronson
Bien, W. J.....Coldwater
Brunson, A. E.....Coldwater
Chipman, E. M.....Quincy
Culver, Bert W.....Coldwater
Danley, W. E.....Union City
Far, S. E.....Quincy

Fraser, R. J.....Bronson
Gist, L. I.....Coldwater
Holbrook, A. G.....Coldwater
Leeder, F. S.....Coldwater
McLain, R. W.....Jackson
Meier, H. J.....Coldwater
Olmsted, Kenneth L.....Coldwater

Phillips, F. L.....Bronson
Schneider, H. A.....Coldwater
Schultz, Samuel.....Coldwater
Scovill, H. A.....Union City
Thomas, J. A.....Coldwater
Wade, R. L.....Coldwater
Weidner, H. R.....Coldwater

ROSTER MICHIGAN STATE MEDICAL SOCIETY

CALHOUN COUNTY

Abbott, NelsonMarshall
Allen, Herbert R.....Battle Creek
Amos, Norman H.....Battle Creek
Baribeau, R. H.....Battle Creek
Barnhart, Samuel E.....Battle Creek
Becker, H. F.....Battle Creek
Beuker, HermanMarshall
Bonifer, Philip.....Battle Creek
Brainard, C. W.....Battle Creek
Byland, N. O.....Battle Creek
Campbell, AliceAlbion
Campbell, R. J.....Battle Creek
Capron, Manley J.....Battle Creek
Church, Starr K.....Marshall
Chynoweth, W. R.....Battle Creek
Cooper, J. E.....Battle Creek
Curry, Robert K.....Homer
Derickson, E. C.....Burlington
Dickson, A. R.....Battle Creek
Dodge, Jr., Warren M.....Battle Creek
Dugan, Wm. M.....Battle Creek
Eggleston, Elmer L.....Battle Creek
Elliott, James.....Battle Creek
Fahndrich, C. G.....Battle Creek
Finch, D. L.....Augusta
Fopeano, John V.....Battle Creek
Fraser, R. H.....Battle Creek
Gething, Joseph V.....Battle Creek
Giddings, A. M.....Battle Creek
Gilfillan, Margery J.....Battle Creek
Godfrey, Willoughby L. (Honorary)
Battle Creek
Gordon, J. K. M.....Battle Creek
Gorsline, Clarence S.....Battle Creek
Hafford, Alpheus T.....Albion
Hafford, George C.....Albion
Hansen, E. L.....Battle Creek
Haughey, WilfridBattle Creek

Haughey, Wm. H. (Honorary)
Battle Creek
Heald, C. W.....Battle Creek
Henderson, Louis M.....Albion
Henderson, PhillipAlbion
Herzer, Henry A.....Albion
Hills, C. R.....Battle Creek
Holes, Jesse J.....Battle Creek
Holtom, B. G.....Battle Creek
Howard, W. L.....Battle Creek
Hoyt, Aura A.....Battle Creek
Humphrey, Archie E.....Marshall
Humphrey, Arthur A.....Battle Creek
Jespersion, Lydia.....Battle Creek
Johnson, O. J.....Marshall
Jones, T. K.....Marshall
Keagle, Lelald R.....Battle Creek
Keeler, K. B.....Albion
Kellogg, John H.....Battle Creek
Kingsley, Paul C.....Battle Creek
Kinde, M. R.....Marshall
Kolvoord, Theodore.....Battle Creek
LaFrance, Francis.....Battle Creek
Landon, Charles C.....Battle Creek
Lanman, Everett L.....Battle Creek
LeDuc, Don M.....Detroit
Lewis, W. B.....Battle Creek
Lowe, H. M.....Battle Creek
Lowe, Kenneth.....Battle Creek
Lowe, Stanley T.....Battle Creek
MacGregor, Archibald E.....Battle Creek
Martin, Walter F.....Battle Creek
Melges, F. J.....Battle Creek
Mercer, C. M.....Battle Creek
Morrison, Donald B.....Tekonsha
Mortensen, Martin A.....Battle Creek
Moshier, Bertha.....Battle Creek
Mustard, Russell.....Battle Creek

Nelson, Albert W.....Battle Creek
Norman, Estelle G.....Florida
Olsen, A. B.....Battle Creek
Overholt, B. M.....Battle Creek
Patterson, A.....Battle Creek
Pritchard, J. Stuart.....Battle Creek
Pudliner, H. G.....Bellevue
Radabaugh, Clara V.....Battle Creek
Riley, William H.....Battle Creek
Robbert, John.....Climax
Rosenfeld, J. E.....Battle Creek
Roth, Paul.....Battle Creek
Royer, C. W.....Battle Creek
Royer, W. A.....Battle Creek
Selmon, Bertha L.....Battle Creek
Sayre, Phillip P.....South Haven
Sharp, A. D.....Albion
Shipp, L. P.....Battle Creek
Simpson, R. S.....Battle Creek
Slagle, George W.....Battle Creek
Sleight, Raymond D.....Battle Creek
Stadle, Wendell H.....Battle Creek
Steinbach, R. H.....Battle Creek
Stewart, Charles E.....Battle Creek
Stiefel, Richard A.....Battle Creek
Tannenholz, Harold S.....Battle Creek
Taylor, Clifford B.....Albion
Upson, W. O.....Battle Creek
Van Camp, Elijah.....Battle Creek
Vander Voort, W. V.....Battle Creek
Verity, Lloyd E.....Battle Creek
Vollmer, Maud J.....Moline, Ill.
Walters, F. R.....Battle Creek
Wencke, Carl G.....Battle Creek
Whyte, Bruce.....Battle Creek
Winslow, Rollin C.....Battle Creek
Zinn, Karl.....Battle Creek

CASS COUNTY

Adams, U. M.....Marcellus
Bryant, S. E.....Dowagiac
Cunningham, E. M.....Cassopolis
Harmon, C. M.....Cassopolis
Hickman, JohnDowagiac

Jones, John H.....Dowagiac
Kelsey, James H.....Cassopolis
Loupee, George.....Dowagiac
Loupee, S. L.....Dowagiac
Lyman, W. R.....Dowagiac

McCutcheon, Wm. C.....Cassopolis
Myers, Charles M.....Dowagiac
Newsome, Otis.....Cassopolis
Pierce, Kenneth C.....Dowagiac
Zwergel, E. H.....Cassopolis

CHIPPEWA-MACKINAC COUNTIES

Bandy, Festus Cecil..Sault Ste. Marie
Blain, James G.....Sault Ste. Marie
Conrad, George A.....Sault Ste. Marie
Cornell, Eliphalet A. (Honorary)
Sault Ste. Marie
Darby, J. F.....St. Ignace
Edmison, W. C.....St. Ignace

Ennis, C. J. (Honorary)
Sault Ste. Marie
Fox, T. Greeley.....Pickford
Gilfillan, E. O.....Sault Ste. Marie
Husband, F. H.....Sault Ste. Marie
Littlejohn, David.....Sault Ste. Marie
Mertaugh, W. F.....Sault Ste. Marie

Moloney, F. J.....Sault Ste. Marie
Reese, J. A.....DeTour
Rhind, E. S.....Rudyard
Tamblyn, F. W.....Sault Ste. Marie
Vegors, Stanley H.....Sault Ste. Marie
Watson, C.....Sault Ste. Marie
Yale, I. V.....Sault Ste. Marie

CLINTON COUNTY

Foo, Charles T.....St. Johns
Frace, Guy H.....St. Johns
Hart, A. O.....St. Johns
Hart, Dean W.....St. Johns

Henthorn, A. C.....St. Johns
Ho, Thomas Y.....St. Johns
Luton, F. E.....St. Johns
MacPherson, D. H.....Fowler

McWilliams, W. B.....Maple Rapids
Richards, F. D.....DeWitt
Russell, Sherwood R.....St. Johns

DELTA COUNTY

Bartley, Geo. C.....Escanaba
Benson, G. W.....Escanaba
Boyce, D. H.....Escanaba
Carlton, A. J.....Escanaba
Chenoweth, Nancy R.....Escanaba
Defnet, Harry John.....Escanaba
Farrier, R. C.....Escanaba

Frenn, N. J.....Bark River
Groos, Harold QuintenEscanaba
Groos, Louis P.....Escanaba
Hult, Otto S.....Gladstone
Kitchen, A. S.....Escanaba
Lemire, Wm. A.....Escanaba

Long, Harry W.....Escanaba
Miller, Albert H.....Gladstone
Mitchell, James D.....Gladstone
Moll, G. W.....Escanaba
Walch, J. J.....Escanaba
Witters, Josef E.....Nahma

DICKINSON-IRON COUNTIES

Alexander, W. H.....Iron Mountain
Anderson, E. B.....Iron Mountain
Boyce, Geo. H.....Iron Mountain
Browning, James L.....Iron Mountain
Crowell, Joseph A.....Iron Mountain
De Salvo, F.....Iron Mountain
Fielding, William.....Norway

Haight, Arthur L.....Crystal Falls
Haight, H. H.....Crystal Falls
Hamlin, Lloyd E.....Norway
Hayes, R. E.....Sagola
Huron, W. H.....Iron Mountain
Irvine, L. E.....Iron River
Kofmehl, Wm. J.....Stambaugh

Larson, H. J.....Crystal Falls
Levine, D. A.....Iron River
Libbey, Edward M.....Iron River
Menzies, CliffordIron Mountain
Smith, Donald R.....Iron Mountain
Walker, Claude W.....Iron Mountain
White, Robert E.....Stambaugh

ROSTER MICHIGAN STATE MEDICAL SOCIETY

EATON COUNTY

Anderson, K. A.....Charlotte
Bradley, James B.....Eaton Rapids
Brown, B. Philip.....Charlotte
Burdick, Austin F.....Lansing
Burleson, A. H. (Honorary).....Olivet
Davis, J. W.....Charlotte
Engle, Paul.....Olivet
Hargrave, Don V.....Eaton Rapids
Huber, Chas. D.....Charlotte
Imthun, Edgar F.....Grand Ledge

Lawther, John.....Charlotte
Lown, C. A.....Grand Ledge
McLaughlin, C. L. D.....Vermontville
Moyer, H. A.....Charlotte
Myers, Albert W.....Pottersville
Paine, Sr., E. M.....Grand Ledge
Paine, Jr., E. Madison.....Grand Ledge
Quick, Phil H.....Olivet
Rickerd, Vinton J.....Charlotte

Sackett, C. S.....Charlotte
Sassman, F. W.....Charlotte
Sevener, C. J.....Charlotte
Sevener, Lester G.....Charlotte
Sheets, A. G.....Eaton Rapids
Stanka, Andrew Geo.....Grand Ledge
Stimson, C. A.....Eaton Rapids
Van Ark, Bert.....Eaton Rapids
Wilensky, Thomas.....Eaton Rapids

GENESEE COUNTY

Andrews, N. A. C.....Flushing
Anthony, George E.....Flint
Ard, Horace.....Montrose
Backus, G. R.....Flint
Bahlman, Gordon H.....Flint
Baird, James.....Flint
Baske, Franklin W.....Flint
Bateman, L. G.....Flint
Benson, J. C.....Flint
Biggar, H. R.....Flint
Blakeley, A. C.....Flint
Bogart, Leon M.....Flint
Boles, Wm. P.....Flint
Bonathan, A. T.....Flint
Bradley, Robert.....Flint
Brain, Gordon R.....Flint
Brasie, D. R.....Flint
Briggs, Guy D.....Flint
Burnell, B. E.....Flint
Burnell, Max.....Flint
Chambers, Myrton S.....Flint
Charters, John H.....Flushing
Childs, Lloyd H.....Flint
Clark, Clifford P.....Flint
Colwell, C. W.....Flint
Connell, J. T.....Flint
Conover, G. V.....Flint
Conover, T. S.....Flint
Cook, Henry.....Flint
Covert, F. L.....Gaines
Credille, B. A.....Flint
Curry, George.....Flint
Curtin, J. H.....Flint
Zingro, N. Del.....Davison
Dimond, E. G.....Flint
Dodds, F. E.....Flint
Drewyer, Glen.....Flint
Edgerton, A. C.....Clio
Evers, J. W.....Flint
Finkelstein, T.....Flint
Flynn, S. T.....Flint
Fuller, H. T.....Mt. Morris
Gelenger, S. M.....Flint
Gibson, T. E.....Flint
Gleason, N. Arthur.....Flint
Goering, George R.....Flint
Golden, H. Maxwell.....Flint
Goodfellow, B. J.....Flint

Gorne, S. S.....Flint
Graham, H.....Mt. Morris
Grover, H. F.....Flint
Guile, Earle.....Flint
Guild, G. S.....Flint
Gundry, G. L.....Grand Blanc
Hague, R. F.....Flint
Halligan, Raymond S.....Flint
Handy, John W.....Flint
Harper, A. W.....Flint
Harper, Homer.....Flint
Hawkins, James E.....Flint
Hiscock, H. H.....Flint
Houston, James.....Swartz Creek
Hubbard, Wm. B.....Flint
Johnson, F.....Flint
Jones, Lafon.....Flint
Kirk, A. Dale.....Flint
Kretchmar, A. H.....Flint
Leach, J. L.....Flint
Logan, G. W.....Flushing
MacDuff, R. B.....Flint
MacGregor, D. M.....Flint
MacGrogor, R. W.....Flint
Macksood, Joseph.....Flint
Malfroid, B. W.....Flint
Marsh, H.....Flint
Marshall, Wm. H.....Flint
Mason, Elta.....Flint
Matthewson, Guy C.....Flint
McArthur, A.....Flint
McGarry, R. A.....Flint
McGregor, James C.....Flint
McKenna, O. W.....Flint
Miner, F. B.....Flint
Moore, John.....Flint
Morrish, Ray S.....Flint
Morrissey, V. S.....Flint
Mosier, Edward C.....Otisville
Odle, Ira.....Flint
Olson, James.....Flint
O'Neil, C. H.....Flint
Orr, Walter J.....Flint
Paul, A. T.....Flint
Pett, Robert.....Flint
Pfeiffer, A. C.....Mt. Morris
Phillips, R. L.....Flint

Pratz, O. C.....Flint
Probert, C. C.....Flint
Randall, H. E.....Flint
Reeder, Frank E.....Flint
Reid, Wells C.....Goodrich
Richeson, V.....Flint
Roberts, Floyd A.....Flint
Rosenblum, Herman.....Flint
Rowley, James A.....Flint
Rundles, Walter Z.....Flint
Scavarda, Charles J.....Flint
Scott, R. D.....Flint
Shantz, L. O.....Flint
Sleeman, Blythe.....Linden
Smith, D. C.....Flint
Sniderman, Benjamin.....Flint
Snyder, Charles E.....Swartz Creek
Sorkin, S. S.....Flint
Spencer, J. A.....Flint
Steinman, F. H.....Flint
Stephenson, Robert A.....Flint
Stevenson, W. W.....Flint
Stewart, Wilbur F.....Flint
Stroup, C. K.....Flint
Sutherland, James K.....Flint
Sutton, George.....Flint
Sutton, M. R.....Flint
Thompson, Alvin.....Flint
Treat, D. L.....Flint
Trumble, G. W.....Flint
Walden, C. E.....Flint
Wall, W. J.....Davison
Ward, Nell.....Flint
Ware, Frank A.....Flint
Wark, D. R.....Flint
Wheelock, A. S.....Flint
White, C. H.....Fenton
White, Herbert.....Flint
Williams, W. S.....Flint
Willoughby, G. L.....Flint
Willoughby, L. L.....Flint
Wills, T. N.....Flint
Winchester, Walter H.....Flint
Woughter, D. H.....Flint
Wright, D. R.....Flint
Wright, G. R.....Montrose
Yeomans, T. G.....Flint

GOGEBIC COUNTY

Anderson, Charles E.....Bessemer
Conley, W. C.....Ironwood
Crosby, Theodore S.....Ironwood
Eisele, D. C.....Ironwood
Gertz, M. A.....Ironwood
Gorrilla, A. C.....Ironwood
Hambley, T. J.....Ironwood
Lieberthal, M. J.....Ironwood
Lieberthal, Paul.....Ironwood

Maccani, William L.....Ironwood
Maloney, F. G.....Ironwood
Nezworski, H. T.....Ironwood
O'Brien, A. J.....Ironwood
Pierpont, D. C.....Ironwood
Pinkerton, H. A.....Ironwood
Pinkerton, W. J.....Bessemer
Prout, Robert I. C.....Wakefield
Rees, Thomas R.....Ironwood

Reynolds, F. L. S.....Ironwood
Root, Charles T.....Watersmeet
Sarvela, H. L.....Ironwood
Stevens, Charles E.....Bessemer
Tew, Wm. Ellwood.....Bessemer
Tressel, H. A.....Wakefield
Urquhart, C. C.....Ironwood
Wacek, W. H.....Ironwood

GRAND TRAVERSE-LEELANAU-BENZIE COUNTIES

Brownson, J. J.....Kingsley
Bushong, B. B.....Traverse City
Covey, E. L.....Traverse City
Ellis, Claude L.....Suttons Bay
Flood, Robert E.....Northport
Gauntlett, J. W.....Traverse City
Goodrich, Dwight.....Traverse City
Holliday, George A.....Traverse City
Huston, Russell R.....Elk Rapids
Jones, Stewart R.....Suttons Bay
Kitson, V. H.....Elk Rapids
Kyselka, H. B.....Traverse City

Lemen, Chas. E.....Traverse City
Minor, Ernest B.....Traverse City
Murphy, Fred E.....Cedar
Osterlin, Mark.....Traverse City
Quinn, Henry M.....Copemish
Rennell, E. J.....Traverse City
Sargent, Leland E.....Kalkaska
Sheets, R. Philip.....Traverse City
Sladek, E. F.....Traverse City
Smiseth, Selmer P.....Suttons Bay
Stone, Fordyce H.....Beulah

Swanton, L.....Traverse City
Swartz, F. G.....Traverse City
Thacker, Fred R.....Frankfort
Thirlby, E. L.....Traverse City
Thompson, T. W.....Traverse City
Trautman, Frederick D.....Frankfort
Rowley, A. S.....Traverse City
Way, Lewis R.....Traverse City
Willard, Wm. G.....Benzonia
Zielke, I. H.....Traverse City
Zimmerman, J. G.....Traverse City

GRATIOT-ISABELLA-CLARE COUNTIES

Aldrich, Alfred L.....Ithaca
Barstow, W. E.....St. Louis
Baskerville, C. M.....Mt. Pleasant
Becker, M. G.....Edmore
Budge, M. J.....Ithaca
Burch, L. J.....Mt. Pleasant
Burt, C. E.....Ithaca
Carney, T. J.....Alma
Dawson, R. E.....Blanchard
Drake, Wilkie M.....Breckenridge

DuBois, C. F.....Alma
Faber, Michael.....Ashley
Graham, B. J.....Alma
Graham, F. J.....Alma
Hall, B. C.....Pompeii
Hammerberg, Kuno.....Clare
Hobbs, A. D.....St. Louis
Howe, Leslie.....Breckenridge
Hubbard, M. C.....Vestaburg
Lamb, E. T.....Alma

McArthur, Stewart C.....Mt. Pleasant
McClinton, R. S.....Shepard
Rondot, E. F.....Lake
Sarven, J. D.....Middleton
Strange, Russell H.....Mt. Pleasant
Waggoner, R. L.....St. Louis
Wilcox, R. A.....Alma
Wilson, Earl C.....Harrison
Wolfe, Kenneth P.....Breckenridge
Wood, Cornelius B.....Clare

HILLSDALE COUNTY

Allegar, W. E. Pittsford
Bates, James A. Camden
Bower, Charles T. Hillsdale
Bowers, M. H. Hillsdale
Clobridge, C. E. Allen
Day, Luther W. Jonesville
Ditmars, William H. Jonesville
Fenton, D. W. Reading
Fisk, F. B. Jonesville

Green, B. F. Hillsdale
Hamilton, A. J. Hillsdale
Hanke, George R. Ransom
Heald, J. E. Hillsdale
Hodge, C. L. Reading
Hughes, Henry F. Hillsdale
Johnson, James H. Hillsdale
Kline, Fred. Litchfield
Mattson, H. F. Hillsdale

Martindale, E. A. Hillsdale
McFarland, O. G. North Adams
McGavran, E. G. Hillsdale
Miller, Harry C. Hillsdale
Poppen, C. J. Reading
Sterling, John S. Jerome
Strom, A. W. Hillsdale
Yeagley, J. L. Waldron

HOUGHTON-BARAGA-KEWEENAW COUNTIES

Abrams, James C. Calumet
Aldrich, A. B. Houghton
Aldrich, Addison D. Houghton
Arminen, K. V. Hancock
Bourland, Philip D. Calumet
Brewington, George F. Mohawk
Buckland, R. S. Baraga
Coffin, Leslie E. Painesdale
Cooper, C. A. Hancock
Gregg, W. T. S. Calumet
Hilmer, R. E. Redridge

Joy, Henry M. Calumet
King, William T. Ahmeek
Kirtan, Joseph R. W. Calumet
LaBine, Alfred. Houghton
Leo, L. S. Houghton
Levin, Simon. Houghton
McQueen, Donald K. Laurium
Maas, R. J. Houghton
Manthei, W. A. Lake Linden
Marshall, Frank F. L'Anse
Quick, James B. Laurium

Roberts, Melvin D. Hancock
Roche, A. C. Calumet
Rupprecht, C. H. Calumet
Scott, William P. Houghton
Sloan, P. T. Trimountain
Stearns, Isadore D. Houghton
Stewart, G. C. Hancock
Stewart, J. C. B. Painesdale
Van Slyke, William H. Hancock
Waldie, George McLeod. Hancock
Wickliffe, T. P. Calumet

HURON-SANILAC COUNTIES

Armitage, C. W. Harbor Beach
Blanchard, E. W. Deckerville
Caccamise, Jos. G. Sebewaing
Cochran, Lewis E. Peck
Seager, M. Cole. Brown City
Gittel, Roy R. Kinde
Gift, W. A. Marlette
Hart, R. K. Crosswell
Herrington, Charles I. Bad Axe

Herrington, Willet J. Bad Axe
Holdship, William B. Ubly
Howell, A. J. Bay Port
Kirkir, F. O. Sandusky
Learnmont, H. H. Crosswell
Lunn, J. O. Harbor Beach
McNaughton, David D. Argyle
Monroe, Duncan J. Elkton
Morden, Charles B. Bad Axe

Norgaard, Hal V. Marlette
Oakes, C. W. Harbor Beach
Ritsema, John. Sebewaing
Robertson, Collin G. Sandusky
Scheurer, C. Pigeon
Thumme, Harrison F. Sebewaing
Tweedie, G. Evans. Sandusky
Tweedie, S. Martin. Sandusky
Webster, John C. Marlette

INGHAM COUNTY

Albers, J. S. East Lansing
Barnum, S. V. Lansing
Barrett, C. D. Lansing
Bartholomew, Henry S. Lansing
Bauer, Theodore I. Lansing
Behen, William C. Lansing
Bellinger, E. G. Lansing
Bolin, R. Mason
Bradford, C. W. Lansing
Breakey, Robt. S. Lansing
Brubaker E. Lansing
Brucker, Karl B. Lansing
Bruegel, Oscar H. East Lansing
Burhans, Robert. Lansing
Cameron, W. J. Lansing
Campbell, Archibald M. Lansing
Carr, Earl I. Lansing
Christian, L. G. Lansing
Cook, R. J. Lansing
Corsaut, J. C. Mason
Culver, C. F. Howell
Cushman, F. J. Lansing
Darling, L. H. Lansing
Davenport, C. S. Lansing
DeVries, C. F. Lansing
Doyle, Charles R. Lansing
Doyle, C. P. Lansing
Drolett, Fred J. Lansing
Drolett, Lawrence. Lansing
Dunn, F. C. Lansing
Ellis, Bertha. Lansing
Ellis, C. W. Lansing
Finch, Russell L. Lansing
Fisher, D. W. Lansing
Fosget, Wilbur W. Lansing
Foust, E. H. Lansing
Freeland, O. H. Mason
French, Horace L. Lansing
Galbraith, Dugald A. Lansing
Gardner, C. B. Lansing
Goldner, R. E. Lansing
Gunderson, G. O. Lansing
Guy, Spencer D. Lansing

Hart, L. C. Lansing
Haynes, H. B. Lansing
Haze, Harry A. Lansing
Heckert, Frank. Lansing
Heckert, J. K. Lansing
Hendren, Owen. Williamston
Henry, L. Lansing
Hermes, Ed. J. Lansing
Himmelberger, R. J. Lansing
Hodges, Kenneth P. Lansing
Huggett, Clare C. Lansing
Huntley, Fred M. Lansing
Hurth, M. S. Lansing
Johnson, K. H. Lansing
Jones, Francis A. Lansing
Kalmbach, R. E. Lansing
Keim, C. Lansing
Kent, Edith Hall. Lansing
Kent, Herbert K. Lansing
Krafts, L. C. Leslie
Larabee, E. E. Williamston
Loree, Maurice C. Lansing
Ludlum, L. C. Lansing
McConnell, E. G. Lansing
McCorvie, C. Ray. East Lansing
McCoy, Earl M. Grand Ledge
McCrumb, R. R. Lansing
McElmurry, N. K. Perry
McGillicuddy, Oliver B. Lansing
McGillicuddy, R. J. Lansing
McIntyre, J. E. Lansing
McNamara, William E. Lansing
McPherson, E. G. Stockbridge
Mercer, Walter E. Webberville
Meyer, H. R. Lansing
Miller, H. A. Lansing
Miller, Robert E. (Honorary). Lansing
Morrow, R. Lansing
Niles, B. D. Lansing
Ochsner, P. J. Lansing
Olin, Richard M. East Lansing
Osborn, Samuel. Lansing
O'Sullivan, Gertrude. Mason

Owen, A. E. Lansing
Peacock, T. L. Lansing
Phillips, R. H. Lansing
Pinkham, R. A. Lansing
Ponton, J. Mason
Prall, H. J. Lansing
Randall, O. M. Lansing
Roberts, D. W. Lansing
Robson, Edmund J. Lansing
Rockwell, H. C. Lansing
Rozan, J. S. Lansing
Russell, Claude V. Lansing
Sander, John F. Lansing
Sanford, Thomas M. Lansing
Seger, Fred L. Lansing
Shaw, Milton. Lansing
Slemmons, C. C. Lansing
Smith, H. M. Lansing
Smith, Lillian R. Lansing
Snell, D. M. Lansing
Snyder, LeMoyn. Lansing
Spencer, Perry. Lansing
Steiner, A. A. Lansing
Stiles, Frank. Lansing
Strauss, P. C. Lansing
Stucky, George. Lansing
Toothaker, Kenneth. Lansing
Towne, Lawrence C. Lansing
Troost, F. Holt
Vander Slice, E. R. Lansing
Vander Zalm, T. P. Lansing
Wadley, R. Lansing
Warford, J. T. Lansing
Webb, Roy O. Okemos
Weinburgh, H. B. Lansing
Welch, William. Lansing
Wetzel, John O. Lansing
Wight, W. G. Lansing
Wiley, Harold W. Lansing
Wellman, John. Lansing
Willson, Howard S. Lansing
Wilson, Harry A. Lansing

IONIA-MONTCALM COUNTIES

Bird, Wm. L. Greenville
Bower, A. J. Greenville
Bracey, L. E. Sheridan
Braley, Frank. Saranac
Cruncan, A. J. Hubbardston
Dunkin, Lloyd S. Greenville
Duval, L. E. Ionia
Ferguson, F. H. Carson City
Fleming, J. C. Pewamo
Fox, Harold M. Portland
Fuller, Rudolphus W. Crystal
Geib, O. P. Carson City

Hansen, M. M. Greenville
Hargrave, F. A. (Emeritus). Palo
Hay, John R. Saranac
Hoffs, M. A. Lake Odessa
Johns, Joseph J. Ionia
Johnson, F. A. Greenville
Kelsey, L. E. Lakeview
Kling, V. F. Ionia
Laughlin, A. I. Clarksville
Lilly, Isaac S. Stanton
Lintner, Roy C. Ionia
Marsh, F. M. Ionia

Marston, L. L. Lakeview
Maynard, Herbert M. Ionia
McCann, John J. Ionia
Norris, William W. Portland
Peabody, C. H. Lake Odessa
Pankhurst, C. T. Ionia
Robertson, P. C. Ionia
Swift, E. R. Lakeview
Van Dellen, Jerrian. Lyons
Van Loo, J. A. Belding
Weaver, Harry B. Greenville
Whitten, R. R. Ionia

ROSTER MICHIGAN STATE MEDICAL SOCIETY

JACKSON COUNTY

Ahronheim, J. H.....Jackson
 Alter, R. H.....Jackson
 Anderson, W. B.....Jackson
 Baker, G. M.....Parma
 Balconi, Henry.....Brooklyn
 Bartholic, F. W.....Grass Lake
 Brown, H. A.....Jackson
 Bullen, G. R.....Jackson
 Chabut, H. M.....Jackson
 Clarke, C. S.....Jackson
 Cochran, Wayne A.....Jackson
 Cooley, Randall M.....Jackson
 Corley, C.....Jackson
 Corley, Ennis.....Jackson
 Cox, Ferdinand.....Jackson
 Crowley, Edward D.....Jackson
 Culver, Guy D.....Stockbridge
 DeMay, C. E.....Jackson
 Dengler, C. R.....Jackson
 Edmonds, J. M.....Horton
 Enders, W. H.....Jackson
 Finton, Walter L.....Jackson
 Foust, W. L.....Grass Lake
 Gibson, F. J.....Jackson
 Glover, H. G.....Jackson
 Greenbaum, Harry.....Jackson
 Hackett, T. E.....Jackson
 Hanft, Cyril F.....Springport
 Hanna, R. J.....Jackson
 Hardie, G. C.....Jackson

Harris, Lester J.....Jackson
 Hicks, Glenn C.....Jackson
 Hungerford, P. R.....Concord
 Huntley, W. B.....Jackson
 Hurley, H. L.....Jackson
 Kudner, Don F.....Jackson
 Kugler, J. C.....Jackson
 Lake, William H.....Jackson
 Lathrop, William W.....Jackson
 Lawton, L. B.....Leslie
 Leahy, E. O.....Jackson
 Leonard, Clyde A.....Jackson
 Lewis, E. F.....Jackson
 Ludwick, J. E.....Jackson
 McGarvey, W. E.....Jackson
 McLaughlin, M. J.....Jackson
 Meads, J. B.....Jackson
 Munro, C. D.....Jackson
 Munro, James E.....Jackson
 Murphy, B. M.....Jackson
 Newton, R. E.....Jackson
 O'Meara, James J.....Jackson
 Page, John W.....Jackson
 Peterson, E. S.....Jackson
 Phillips, David P.....Jackson
 Porter, H. W.....Jackson
 Pray, Frank F.....Jackson
 Pray, George R.....Jackson
 Ransom, F. G.....Jackson
 Riley, Philip A.....Jackson

Roberts, Arthur J.....Jackson
 Schepeler, Cortlandt W.....Brooklyn
 Scheurer, P. A.....Manchester
 Schmidt, T. E.....Jackson
 Scott, John A.....Jackson
 Seybold, G. A.....Jackson
 Shaeffer, A. M.....Jackson
 Smith, John C.....Jackson
 Snow, W. R.....Jackson
 Speck, John W.....Jackson
 Spicer, W. E.....Jackson
 Stewart, L. L.....Jackson
 Stewart, Maitland N.....Jackson
 Susskind, M. V.....Jackson
 Tate, Cecil E.....Vandercook Lake
 Thalner, L. F.....Jackson
 Thayer, E. A.....Jackson
 Townsend, J. W.....Vandercook Lake
 Tuthill, F. D.....Concord
 Van Schoick, J. D.....Hanover
 Van Schoick, Frank.....Jackson
 Wertemberger, M. D.....Jackson
 Wholihan, John W.....Michigan Center
 Wickham, W. A.....Jackson
 Wilson, E. D.....Jackson
 Wilson, E. G.....Jackson
 Wilson, N. D.....Jackson
 Winter, G. E.....Jackson
 Woyt, S. W.....Jackson

KALAMAZOO-VAN BUREN COUNTIES

Aach, Hugo.....Kalamazoo
 Adams, R. U.....Kalamazoo
 Alexander, C. A.....Kalamazoo
 Ames, Edward, (Emeritus) Kalamazoo
 Andrews, F. T.....Kalamazoo
 Andrews, Sherman.....Kalamazoo
 Armstrong, Robert J.....Kalamazoo
 Balch, Ralph E.....Kalamazoo
 Banner, Lawrence R.....Kalamazoo
 Barnebee, J. W.....Kalamazoo
 Barrett, F. Elizabeth.....Kalamazoo
 Behan, Gerald C.....Galesburg
 Bennett, Charles L.....Kalamazoo
 Berry, J. F.....Kalamazoo
 Bodmer, H. C.....Kalamazoo
 Bope, Wm. P.....Decatur
 Borgman, Wallace.....Kalamazoo
 Boothby, F. M.....Lawrence
 Boys, C. E.....Kalamazoo
 Braden, G. M., (Honorary).....Scotts
 Brooks, Ervin D.....Kalamazoo
 Brown, I. W.....Kalamazoo
 Burns, J. T.....Kalamazoo
 Caldwell, George H.....Kalamazoo
 Cobb, Horace R.....Kalamazoo
 Collins, Ward E.....Kalamazoo
 Cook, R. G.....Kalamazoo
 Crawford, Kenneth.....Kalamazoo
 Crum, Leo J.....Kalamazoo
 Dean, Ray.....Three Rivers
 Den Bleyker, Walter.....Kalamazoo
 De Witt, L. H.....Kalamazoo
 Diephus, Bert.....South Haven
 Dowd, B. J.....Kalamazoo
 Doyle, F. M.....Kalamazoo
 Ertell, Wm. Francis.....Kalamazoo
 Fast, R. B.....Kalamazoo
 Fortner, R. J.....Three Rivers
 Fulkerson, C. B.....Kalamazoo
 Fuller, P. M.....Kalamazoo
 Fuller, R. T.....Kalamazoo
 Gerstner, Louis.....Kalamazoo

Giffen, John R.....Bangor
 Gilding, Joseph.....Vicksburg
 Gilding, Z. L.....Vicksburg
 Grant, Frederick E.....Kalamazoo
 Greenman, Newton H.....Decatur
 Gregg, Sherman.....Kalamazoo
 Harter, Randolph S.....Schoolcraft
 Henwood, A. R.....Kalamazoo
 Hildreth, R. C.....Kalamazoo
 Hobbs, Edw. J.....Galesburg
 Hodgman, Albert.....Kalamazoo
 Hoebeke, Wm. G.....Kalamazoo
 Hubbell, R. J.....Kalamazoo
 Huyser, Wm. C.....Kalamazoo
 Ilgenfritz, F. M.....Kalamazoo
 Irwin, Wm. D.....Kalamazoo
 Itzen, J. F.....South Haven
 Jackson, John B.....Kalamazoo
 Jennings, W. O.....Kalamazoo
 Kenzie W. N.....Camp Custer
 Kingma, J. G.....Decatur
 Klerk, W. J.....Kalamazoo
 Koestner, P. A.....Kalamazoo
 Lambert, R. H.....Kalamazoo
 Lang, W. W.....Kalamazoo
 La Victoire, Isaac N.....Kalamazoo
 Light, Richard U.....Kalamazoo
 Light, S. Rudolph.....Kalamazoo
 Littig, John.....Kalamazoo
 Lowe, Edwin G.....Bangor
 MacGregor, J. R.....Kalamazoo
 Malone, James G.....Kalamazoo
 Maxwell, J. Charles.....Paw Paw
 McCarthy, J. S.....Kalamazoo
 McIntyre, Charles H.....Kalamazoo
 McNabb, A. A.....Lawrence
 McNair, Rush.....Kalamazoo
 Morter, Roy A.....Kalamazoo
 Murphy, Norman D.....Bangor
 Murry, W. A.....Kalamazoo
 Nibbelink, Benjamin.....Kalamazoo
 Osborne, Charles E.....Vicksburg

Patmos, Martin.....Kalamazoo
 Peelen, J. W.....Kalamazoo
 Peelen, Mathew.....Kalamazoo
 Penoyer, C. L.....South Haven
 Perry, Clifton.....Kalamazoo
 Pratt, F. A.....Kalamazoo
 Prentice, Hazel R.....Kalamazoo
 Pullon, A. R.....Kalamazoo
 Rickert, J. A.....Allegan
 Rigtierink, H. A.....Kalamazoo
 Riley, G. M.....Gobles
 Rockwell, A. H., (Honorary) Kalamazoo
 (Honorary)
 Rockwell, Donald C.....Kalamazoo
 Sage, E. D.....Kalamazoo
 Scholten, D. J.....Kalamazoo
 Scholten, Wm.....Kalamazoo
 Schrier, Paul.....Kalamazoo
 Schrier, Thomas.....Comstock
 Sears, H. A.....Kalamazoo
 Shackleton, Wm. E.....Kalamazoo
 Shepard, Benjamin A.....Kalamazoo
 Shook, R. Wm.....Kalamazoo
 Southworth, M. N.....Schoolcraft
 Squires, David E.....Kalamazoo
 Stewart, L. H.....Kalamazoo
 Ten Houten, Charles.....Paw Paw
 Unrath, Clara.....Kalamazoo
 Upjohn, E. Clifford.....Kalamazoo
 Upjohn, L. N.....Kalamazoo
 Van Ness, J. Howard.....Allegan
 Van Urk, Thomas.....Kalamazoo
 Walker, Burt D.....Kalamazoo
 Weirich, Richard.....Marcellus
 West, A. E.....Kalamazoo
 Westcott, L. E.....Kalamazoo
 Wilbur, E. P.....Kalamazoo
 Wilkinson, Chester A.....Kendall
 Williams, F. N.....Hartford
 Youngs, A. S.....Kalamazoo
 Youngs, C. A.....Kalamazoo
 Young, Williams R.....Lawton

KENT COUNTY

Aitken, George T.....Grand Rapids
 Adams, F. A.....Grand Rapids
 Altland, J. K.....Lowell
 Bachman, G. A.....Grand Rapids
 Baert, George H.....Grand Rapids
 Baker, Abel J.....Grand Rapids
 Ballard, M. S.....Grand Rapids
 Beeman, C. E.....Grand Rapids
 Beets, W. Clarence.....Grand Rapids
 Bell, Charles M.....Grand Rapids
 Bellerue, A. R.....Grand Rapids
 Bettison, Wm. L.....Grand Rapids
 Billings, Elton P.....Grand Rapids
 Bishop, T. P.....Grand Rapids
 Blackburn, Henry M.....Grand Rapids

Boet, F. A.....Grand Rapids
 Bond, George Lewis.....Grand Rapids
 Bosch, L. C.....Grand Rapids
 Brayman, C. W.....Cedar Springs
 Brook, Jacob D.....Grandville
 Brotherhood, J. S.....Grand Rapids
 Browning, Eugene S.....Grand Rapids
 Burling, Wesley M.....Grand Rapids
 Butler, Wm. J.....Grand Rapids
 Cameron, Don Bruce.....Grand Rapids
 Campbell, Alexander M.....Grand Rapids
 Cardwell, John F.....Grand Rapids
 Chadwick, W. L.....Grand Rapids
 Chamberlain, L. H.....Grand Rapids
 Chandler, Donald.....Grand Rapids

Cilley, E. O.....Grand Rapids
 Claytor, R. W.....Grand Rapids
 Collisi, H. S.....Grand Rapids
 Colvin, W. G.....Grand Rapids
 Corbus, Burton R.....Grand Rapids
 Crane, Charles V.....Grand Rapids
 Crane, Harold D.....Grand Rapids
 Cuncannan, M. E.....Grand Rapids
 Currier, F. P.....Grand Rapids
 Dales, Ernest W.....Grand Rapids
 Davis, D. B.....Grand Rapids
 De Boer, Guy Wm.....Grand Rapids
 DeJong, C.....Grand Rapids
 Dell, E. E.....Sand Lake
 DeMaagd, Gerald.....Rockford

ROSTER MICHIGAN STATE MEDICAL SOCIETY

DeMol, Richard J.....Grand Rapids
Denham, R. H.....Grand Rapids
DePrec, Isla G.....Grand Rapids
DeVel, Leon.....Grand Rapids
DeVries, Daniel.....Grand Rapids
Dewar, M. M.....Grand Rapids
Dixon, Willis L.....Grand Rapids
Doran, Frank.....Grand Rapids
Droste, James C.....Grand Rapids
Eaton, Robert M.....Grand Rapids
Eggleston, H. R.....Grand Rapids
Fellows, Kenneth E.....Grand Rapids
Ferguson, Lynn A.....Grand Rapids
Ferguson, Ward S.....Grand Rapids
Ferrand, L.....Rockford
Fitts, Ralph L.....Grand Rapids
Foshee, J. C.....Grand Rapids
Grant, C. H.....Grand Rapids
Gaikema, E. W.....Grand Rapids
Gainey, James J.....Grand Rapids
German, William.....Grand Rapids
Gillett, O. G.....Grand Rapids
Grant, Lee O.....Grand Rapids
Grant, Lucille B.....Grand Rapids
Graybiel, George.....Caledonia
Griffith, L. S.....Grand Rapids
Haas, John H.....Grand Rapids
Hagerman, D. B.....Grand Rapids
Hammond, T. W.....Grand Rapids
Hardy, Faith F.....Grand Rapids
Hayes, L. W.....Howard City
Heetderks, Dewey R.....Grand Rapids
Henry, Jr., James.....Grand Rapids
Herrick, Ruth.....Grand Rapids
Hill, A. M.....Grand Rapids
Hilt, L. M.....Grand Rapids
Hodgen, J. T.....Grand Rapids
Holcomb, John N.....Grand Rapids
Holcomb, J. W.....Grand Rapids
Holdsworth, M. J.....Grand Rapids
Hollander, Stephen.....Grand Rapids
Hoogerhyde, Jack.....Grand Rapids
Houghton, G. D.....Caledonia
Huffman, A. R.....Grand Rapids
Hunderman, Edward.....Grand Rapids
Hutchinson, Robert J.....Grand Rapids
Hyland, W. A.....Grand Rapids
Irwin, Thomas C.....Grand Rapids
Jaracz, W. J.....Grand Rapids
Kemmer, Thomas R.....Grand Rapids
Kendall, Eugene L.....Grand Rapids
Klaus, C. D.....Grand Rapids
Kniskern, P. W.....Grand Rapids
Kooistra, Henry P.....Grand Rapids
Kremer, John.....Grand Rapids

Kreulen, H. J.....Grand Rapids
Laird, Robert G.....Grand Rapids
Lamb, George F.....Grand Rapids
Lanning, N. E.....Grand Rapids
Lanting, D. B.....Grand Rapids
Le Roy, Simeon.....Grand Rapids
Liefers, Harry.....Grand Rapids
Lyman, William D.....Grand Rapids
MacPherson, Alexander G.....Grand Rapids
Marrin, M. M.....Grand Rapids
Marsh, J. P.....Grand Rapids
Maurits, Reuben.....Grand Rapids
McBride, George L.....Grand Rapids
McKenna, J. L.....Grand Rapids
McKinlay, L. N.....Grand Rapids
McRae, John H.....Grand Rapids
Meengs, Jacob Earl.....Grand Rapids
Miller, J. Duane.....Grand Rapids
Miller, John J.....Marne
Mitchell, H. C.....Grand Rapids
Mitchell, W. B.....Grand Rapids
Moen, Cornetta G.....Grand Rapids
Moleski, Stanley L.....Grand Rapids
Moll, Arthur M.....Grand Rapids
Mollman, Arthur.....Grand Rapids
Moore, Vernor M.....Grand Rapids
Morrill, Donald M.....Detroit
Mulder, J. D.....Grand Rapids
Murphy, M. J.....Grand Rapids
Nelson, A. R.....Grand Rapids
Nesbitt, E. N.....Grand Rapids
Noordewier, Albert.....Grand Rapids
Northhouse, Peter B.....Grandville
Northrup, William.....Grand Rapids
Nyland, Albertus (Honorary).....Grand Rapids
Oliver, W. W.....Grand Rapids
Patterson, Winfred P.....Grand Rapids
Pedden, Jr., J. R.....Grand Rapids
Pott, A. L.....Grand Rapids
Pyle, Henry J.....Grand Rapids
Quigley, Ruth E.....Grand Rapids
Ralph, Paul L.....Grand Rapids
Reed, Torrance.....Grand Rapids
Rigterink, J. W.....Grand Rapids
Riley, G. L.....Grand Rapids
Roberts, Mortimer E.....Grand Rapids
Robertson, F. Dunbar.....Grand Rapids
Robinson, Harold.....Grand Rapids
Rodgers, W. L.....Grand Rapids
Rogers, John R.....Grand Rapids
Roth, Emil M.....Grand Rapids
Schermerhorn, L. J.....Grand Rapids
Schnoor, E. W.....Grand Rapids

Sevensma, E. S.....Grand Rapids
Sevey, L. E.....Grand Rapids
Shepard, B. H.....Lowell
Shellman, Millard W.....Grand Rapids
Smith, A. B.....Grand Rapids
Smith, Edwin M.....Grand Rapids
Smith, Ferris N.....Grand Rapids
Smith, R. Earle.....Grand Rapids
Smith, Richard R.....Grand Rapids
Snapp, Carl F.....Grand Rapids
Snyder, Clarence.....Grand Rapids
Southwick, George H.....Grand Rapids
Steffensen, W. H.....Grand Rapids
Stonehouse, G. G.....Grand Rapids
Stover, Virgil E.....Grand Rapids
Stuger, Cullen E.....Grand Rapids
Ten Have, J.....Grand Rapids
Tesseine, A. J.....Grand Rapids
Teusink, J. H.....Cedar Springs
Thompson, Sr., Archibald B.....Grand Rapids
Thompson, Athol B.....Grand Rapids
Thompson, P. L.....Grand Rapids
Tidey, Marcus B.....Grand Rapids
Tiffany, Joseph C.....Grand Rapids
Tolley, Edw. W.....Grand Rapids
Torgerson, Wm. R.....Grand Rapids
Van Bree, R. S.....Grand Rapids
Vanden Berg, Henry J.....Grand Rapids
Van Duine, H. J.....Byron Center
Van Solkema, Andrew.....Grand Rapids
Van Solkema, Arthur.....Grandville
Van Woerkom, Daniel.....Grand Rapids
Veldman, Harold E.....Grand Rapids
Veenboer, Wm. H.....Grand Rapids
Vis, William R.....Grand Rapids
Votey, Frank A.....Grand Rapids
Vyn, J. D.....Grand Rapids
Warnshuis, Frederick C. (Honorary Life Member) San Francisco, Cal.
Webb, Rowland.....Grand Rapids
Webster, G. W.....Grand Rapids
Wells, Merrill.....Grand Rapids
Wenger, A. V.....Grand Rapids
Wenger, John N.....Coopersville
Westrate, Paul.....Grand Rapids
Whalen, John M.....Grand Rapids
Whinery, Joseph B., Sr.....Grand Rapids
Willits, P. W.....Grand Rapids
Wilson, Wm. E.....Grand Rapids
Winter, Garrett E.....Grand Rapids
Wolfe, H. C.....Grand Rapids
Woodburne, A. R.....Grand Rapids
Wright, John M.....Grand Rapids
Yegge, J. P.....Kent City

LAPEER COUNTY

Berghorst, John.....Imlay City
Best, Herbert M.....Lapeer
Bishop, G. C.....Almont
Burley, David H.....Almont
Chapin, Clarence D.....Columbiaville
Crankshaw, D. W.....Imlay City

Dixon, Robert L.....Lapeer
Dorland, Clark.....Lapeer
Hanna, Fred R.....Lapeer
Jackson, Carl C.....Imlay City
McBride, J. R.....North Branch
Merz, Henry G.....Lapeer

O'Brien, Daniel J.....Lapeer
Smith, J. E. R.....Imlay City
Thomas, J. Orville.....North Branch
Tinker, F. A. (Honorary).....Lapeer
Zemmer, H. B.....Lapeer

LENAWEE COUNTY

Abraham, A. O.....Hudson
Blanchard, L. E.....Hudson
Bland, J. P.....Adrian
Case, C. W.....Onsted
Chase, Armetus W.....Adrian
Claffin, G. M.....Deerfield
Clark, A. D.....Adrian
Claxton, W. T.....Britton
Colbath, W. E.....Adrian
Growth, B. H.....Addison
Hall, George C.....Adrian
Hammel, H. H.....Tumecseh
Hamby, S. B.....Onsted
Hardy, P. B.....Tumecseh

Heffron, C. H.....Adrian
Heffron, Howard H.....Adrian
Helzerman, Ralph F.....Tumecseh
Hewes, A. B.....Adrian
Hornsby, W. B.....Clinton
Howland, F. A.....Adrian
Jewett, Jr., William E.....Adrian
Lamley, Arthur E.....Blissfield
Lane, C. S.....Hudson
Loveland, Horace H.....Tumecseh
MacKenzie, W. S.....Adrian
McCue, F. J.....Hudson
Marsh, R. G. B.....Tumecseh

Miller, Perry Lynford.....Adrian
Morden, Esli T.....Adrian
Murawa, V. J.....Deerfield
Pabmos, Bernard.....Adrian
Peters, W. L.....Morenci
Raabe, E. C.....Morenci
Rogers, J. D.....Adrian
Spalding, I. L.....Hudson
Stafford, Leo J.....Adrian
Tubbs, R. V.....Blissfield
Van Dusen, C. A.....Blissfield
Whitney, O.....Adrian
Wood, A. C.....Adrian

LIVINGSTON COUNTY

Anderson, R. S.....Howell
Backe, John C.....Howell
Brigham, Jeannette.....Howell
Brueckner, H. H.....Howell
Burt, K. L.....Howell
Cameron, Duncan A.....Brighton
Glenn, Bernard H.....Fowlerville

Hendron, J. J.....Fowlerville
Hill, Harold C.....Howell
Huntington, H. G.....Howell
Laboe, Edward W.....Howell
Leslie, G. L.....Howell
McGregor, Archie J.....Brighton

McIndoe, R. Bruce.....Howell
Mellus, H. P.....Brighton
Sigler, C. L.....Pinckney
Sigler, Hollis L.....Howell
Stephens, D. C.....Howell
Toan, J. W.....Howell

LUCE COUNTY

Rohn, Frank P.....Newberry
Campbell, E. H.....Newberry
Gibson, R. E. L.....Newberry
Hart, C. D.....Newberry

Perry, Henry E.....Newberry
Purmont, Jr., William R.....Newberry
Rehn, A. T.....Newberry
Spinks, Robert Earl.....Newberry

Surrell, M. A.....Newberry
Swanson, Geo. F.....Newberry
Toms, C. B.....Newberry

ROSTER MICHIGAN STATE MEDICAL SOCIETY

MACOMB COUNTY

Allen, Leroy K.....Roseville
Bailey, R.....St. Clair Shores
Banting, O. F.....Richmond
Berry, Henry G.....Mt. Clemens
Bower, A. B.....Armada
Caster, E. Wilbur.....Mt. Clemens
Croman, Jr., Joseph M.....Mt. Clemens
Croman, Sr., Joseph M.....Mt. Clemens
Curlett, J. E.....Roseville
Dudzinski, E. J.....New Baltimore
Engels, John A.....Richmond
Fluemer, Oswald.....Mt. Clemens

Hawley, R. E.....St. Clair Shores
Heine, Austin W.....Mt. Clemens
Kane, Wm. J.....Mt. Clemens
Lynch, Russell.....Centerline
Meek, Charles.....New Baltimore
Moore, G. F.....Mt. Clemens
Norton, W. H.....Mt. Clemens
Peltier, Stanley.....Mt. Clemens
Reichman, Joseph J.....Mt. Clemens
Reitzel, Rufus H.....Mt. Clemens
Rivard, C. H.....St. Clair Shores
Rothman, A. M.....East Detroit

Russell, T. P.....Centerline
Salot, R. F.....Mt. Clemens
Scher, Joseph N.....Mt. Clemens
Seaman, John.....New Haven
Smith, M. C.....Mt. Clemens
Sturm, Fred A.....St. Clair Shores
Thompson, A. A.....Mt. Clemens
Ullrich, R. W.....Mt. Clemens
Wilde, M. M.....Warren
Wiley, Bruce.....Utica
Wiley, Herbert H.....Utica
Wolfson, Victor H.....Mt. Clemens

MANISTEE COUNTY

Bryan, Kathryn M.....Manistee
Grant, C. L.....Manistee
Fairbanks, Stephen.....Luther
Hansen, E. C.....Manistee
Jamieson, David A.....Arcadia
Knopa, John F.....Manistee

Lewis, Lee A.....Manistee
MacMullen, Harlen.....Manistee
McKay, A. A.....Midland
Meade, Wm.....New Orleans, La.
Miller, E. B.....Manistee

Mullenmeister, H. F.....Bear Lake
Norconk, Ward H.....Bear Lake
Oakes, Ellery A.....Manistee
Ramsdell, Homer A.....Manistee
Switzer, Lars W.....Manistee

MARQUETTE-ALGER COUNTIES

Barnes, Haldor.....Munising
Bennett, Arthur K.....Marquette
Bertucci, J. P.....Ishpeming
Blake, H. P.....Marquette
Bottum, Charles N.....Marquette
Burke, R. A.....Palmer
Cooperstock, M.....Marquette
Corcoran, W. A.....Ishpeming
Corneliuson, Goldie B.....Lansing
Crane, J. P.....Ishpeming
Drury, Charles P.....Marquette

Elzinga, E. R.....Marquette
Erickson, Arvid W.....Ishpeming
Felch, Theodore A.....Ishpeming
Fenning, F. A.....Marquette
Hartt, P. P.....Ishpeming
Hirwas, C. L.....Marquette
Hornbogen, D. P.....Marquette
Howe, L. W.....Marquette
Jones, R. Grant.....Marquette
Le Golvan, C.....Marquette

Markham, H. B.....Marquette
Mudge, W. A.....Negaunee
Niemi, O. I.....Marquette
Picotte, Wilfrid S.....Ishpeming
Robbins, Nelson J.....Negaunee
Sciotte, Isiah.....Michigan
Swinton, A. L.....Marquette
Talso, Jacob.....Ishpeming
Vandeventer, Vivian H.....Ishpeming
Van Riper, Paul.....Champion

MASON COUNTY

Blanchett, Victor J.....Custer
Farrier, Robert.....Ludington
Heysett, Fredk. W.....Ludington
Hoffman, Howard.....Ludington

Kirwan, Edward J.....Ludington
Martin, Wm. S.....Ludington
Paukstis, Chas.Ludington

Scott, E. R.....Ludington
Spencer, C. M.....Scottville
Switzer, G. O. (Honorary)..Ludington

MECOSTA-OSCEOLA COUNTIES

Bruggema, Jacob.....Evart
Bunce, E. P.....Trufant
Campbell, James B.....Big Rapids
Chess, Leo F.....Reed City
Clark, Chester.....Morley
Franklin, Benjamin L.....Remus

Grieve, Glenn.....Big Rapids
Igloe, Max C.....Big Rapids
Kelsey, L. E.....Lakeview
Kilmer, Paul B.....Reed City
McIntyre, Donald.....Big Rapids
McGrath, V. J.....Reed City

Peck, Louis K.....Barryton
Power, C. J.....Remus
Soper, Charles L.....Barryton
Treynor, Thomas P.....Big Rapids
Yeo, Gordon H.....Big Rapids

MENOMINEE COUNTY

Barkman, F. J.....Menominee
Berg, Laurence A.....Menominee
Flanagan, Clarence B.....Menominee
Jones, Wm. S.....Menominee

Kaye, J. T.....Menominee
Kerwell, K. C.....Stephenson
Mason, Stephen C.....Menominee
McComb, Earl V.....Menominee

Peterson, A. R.....Daggett
Sawbridge, Edward.....Stephenson
Setheny, Henry T.....Menominee
Towey, J. W.....Powers

MIDLAND COUNTY

Burkett, L. V.....Midland
Grew, N. C.....Midland
High, C. V.....Midland
McCallum, Charles.....Midland

Maynard, W. A.....Coleman
Meisel, Edward H.....Midland
Pike, Melvin H.....Midland

Rice, Robert E.....Midland
Sherk, J. H.....Midland
Towsley, W. D.....Midland

MONROE COUNTY

Acker, William F.....Monroe
Ames, Florence.....Monroe
Banister, E. B.....Monroe
Barker, Vincent L.....Monroe
Blanchett, A. D.....Monroe
Bond, W. W.....Monroe
Cooper, E. M.....Rockwood
Denman, Dean C.....Monroe
Dusseau, S. V.....Erie
Ewing, R. T.....Monroe
Gelhaus, Wm. J.....Monroe

Glenn, Audrey.....Monroe
Golviniaux, C. J.....Monroe
Graubner, F. L.....Monroe
Gray, H. T.....Carleton
Heffernan, John F.....Carleton
Hunter, M. A.....Monroe
Landon, Herbert W.....Monroe
Long, Edgar C.....Monroe
McDonald, T. A.....Monroe
McGeoch, R. W.....Monroe
McMillin, J. H.....Monroe

Newcomb, S. O.....Ida
Parmelee, O. E.....Lambertville
Penzotti, S. C.....Dundee
Reisig, A. H.....Monroe
Siffer, J. J.....Monroe
Smith, William A.....Petersburg
Stewart, W. H.....Petersburg
Stolpestad, C. T.....Monroe
Tomlinson, Ledyard.....Newport
Williams, Robert J.....Monroe
Williamson, George.....Dundee

MUSKEGON COUNTY MEDICAL SOCIETY

August, R. V. Muskegon Heights
 Barnard, Helen S. Muskegon
 Bartlett, F. H. Muskegon
 Beers, C. W. Holton
 Bloom, C. J. Muskegon
 Boonstra, Frank Muskegon
 Boyd, D. R. Muskegon
 Bradshaw, P. S. Muskegon
 Cavanaugh, R. G. Muskegon
 Chapin, W. S. Muskegon Heights
 Cloz, H. F. Muskegon
 Cohan, S. G. Muskegon
 Colignon, C. M. Muskegon
 Collier, C. C. Whitehall
 D'Alcorn, E. N. Muskegon
 Dasler, A. F. Muskegon Heights
 Diskin, Frank Muskegon
 Douglass, R. J. Muskegon
 Drummond, S. J. Casnovia
 Durham, C. J. Muskegon
 Bowers, J. G. Muskegon
 Eckerman, C. T. Muskegon
 Egan, A. B. Muskegon
 Fillingham, Emid. Muskegon
 Fleischman, C. B. Muskegon

Fleishman, N. A. Muskegon
 Foss, E. O. Muskegon
 Garber, F. W. Muskegon
 Garland, J. O. Muskegon
 Gillard, J. L. Muskegon
 Goltz, Martha Montague
 Hagen, W. A. Muskegon
 Hannum, F. W. Muskegon
 Harrington, A. F. Muskegon
 Harrington, R. J. Muskegon
 Hartwell, S. W. Muskegon
 Heneveld, John Muskegon
 Holly, L. E. Muskegon
 Holmes, R. H. Muskegon
 Jackson, S. A. Muskegon
 Kane, T. J. Muskegon
 Keilin, Marie Muskegon
 Kerr, H. J. Muskegon
 Kniskern, E. L. Muskegon
 LeFevre, George L. Muskegon
 LeFevre, Louis Muskegon
 LeFevre, William M. Muskegon
 LaCore, O. M. Muskegon Heights
 Lauretti, E. J. Muskegon
 Laurin, V. S. Muskegon

Loomis, J. L. Muskegon
 Loughery, H. B. Muskegon
 Meengs, M. B. Muskegon Heights
 Mandeville, C. B. Muskegon
 Medema, P. E. Muskegon
 Morford, F. N. Muskegon
 Morse, B. W. Whitehall
 Mulligan, A. W. Muskegon
 Oden, C. L. A. Muskegon
 Olson, R. G. Muskegon Heights
 Pangerl, Carl Muskegon Heights
 Pettis, E. M. Muskegon
 Powers, L. I. Muskegon
 Pyle, H. J. Muskegon
 Quick, Paul A. (Honorary) Muskegon
 Risk, R. A. Muskegon
 Risk, R. D. Muskegon
 Spoor, A. A. Muskegon
 Stone, M. E. Muskegon
 Swartout, W. C. Muskegon
 Teifer, C. A. Muskegon
 Thieme, S. W. Ravenna
 Thornton, E. S. Muskegon
 Wilke, C. A. Montague
 Wilson, P. S. Muskegon

NEWAYGO COUNTY

Barnum, W. H. Fremont
 DeHaas, N. Fremont
 Drummond, P. Grant
 Geerlings, Lambert Fremont

Geerlings, Willis Fremont
 Lettings, D. Grant
 Moore, H. R. Newaygo

Post, Guy White Cloud
 Stryker, O. D. Fremont
 Tompsett, Arthur C. Hesperia

NORTHERN MICHIGAN MEDICAL SOCIETY

Antrim, Charlevoix, Cheboygan, Emmet

Armstrong, Robt. B., Sr. Charlevoix
 Burns, Dean C. Petoskey
 Chapman, W. E. Cheboygan
 Christie, E. A. Cheboygan
 Conkle, Guy C. Boyne City
 Conway, Wm. S. Petoskey
 Craddock, John. Mackinaw City
 Dean, Carleton Charlevoix
 Duffie, Don Hastings. Central Lake
 Engle, Ralph D. Petoskey
 Frank, Gilbert E. Harbor Springs

Grillet, F. F. Alanson
 Harrington, H. M. East Jordan
 Huebner, A. C. Onaway
 King, George W. Charlevoix
 Larson, W. E. Levering
 Lashmet, Floyd H. Petoskey
 MacGregor, J. G. Boyne City
 Mast, W. H. Petoskey
 Mayne, Frederick C. Cheboygan
 McMillan, Fraley Charlevoix

Miller, Samuel L. Cheboygan
 Monfort, Robert Onaway
 Palmer, Russell. St. James
 Parks, W. H. Petoskey
 Reed, Wilbur F. (Honorary) Cheboygan
 Rodgers, John Bellaire
 Saltonstall, Gilbert B. Charlevoix
 Stringham, J. R. Cheboygan
 Tiffany, A. C. Mackinaw City
 VanLeuven, B. H. Petoskey

OAKLAND COUNTY

Abbott, V. C. Pontiac
 Aschenbrenner, Z. R. Farmington
 Bachelder, Frank S. Pontiac
 Baker, Frederick A. Pontiac
 Baker, Robert H. Pontiac
 Barker, Howard B. Pontiac
 Bauer, Ernest W. Hazel Park
 Beck, O. O. Birmingham
 Benning, C. H. Peoria, Ill.
 Borland, Alexander Pontiac
 Bradley, Everett L. Pontiac
 Burke, Chauncey G. Pontiac
 Burt, F. J. Holly
 Butler, Samuel A. Pontiac
 Cameron, D. A. Royal Oak
 Castell, Daniel G. Pontiac
 Christie, J. W. Pontiac
 Church, J. E. Pontiac
 Cobb, Leon F. Pontiac
 Colvin, N. B. Pontiac
 Cook, Ernest A. Pontiac
 Cooper, Robert J. Pontiac
 Corbit, Aileen B. Oxford
 Crissman, H. C. Ferndale
 Cudney, Ethan B. Pontiac
 Dahlgren, Carl. Keego Harbor
 Darling, Jr., C. G. Pontiac
 Ekelund, C. T. Pontiac
 Farnham, Lucius A. Pontiac
 Ferris, Ralph G. Birmingham
 Fitzpatrick, Francis Pontiac
 Fox, John W. Pontiac
 Furlong, Harold A. Pontiac
 Gatley, L. Warren Pontiac
 Gerls, Frank B. Pontiac
 German, Frank D. Pontiac
 Gordon, J. H. Birmingham
 Grant, Wm. A. Milford

Green, Wm. M. Pontiac
 Halsted, Lee H. Farmington
 Hammer, Carl W. Oxford
 Hammonds, E. E. Birmingham
 Harvey, Campbell Pontiac
 Hasner, R. B. Royal Oak
 Hathaway, Clarence L. Lake Orion
 Hathaway, Wm. Rochester
 Henry, Colonel R. Ferndale
 Hassberger, J. B. Birmingham
 Huffman, M. R. Milford
 Howlett, E. V. Pontiac
 Hoyt, D. F. Pontiac
 Hume, T. W. K. Auburn Heights
 Hurst, Daniel D. Pleasant Ridge
 Johnson, C. E. Pontiac
 Jones, Morrell M. Pontiac
 Kelly, Wm. H. Pontiac
 Kemp, W. Lloyd. Birmingham
 Kupka, Edward Pontiac
 Lambie, John S. Pontiac
 Larson, B. T. Pontiac
 Lawler, C. F. Birmingham
 Lewis, Sol M. Ferndale
 Lindsay, E. J. Walled Lake
 Margraves, Edmund D. Royal Oak
 McConkie, J. P. Birmingham
 McNeill, H. H. Pontiac
 Meinke, Herman A. Royal Oak
 Mercer, Frank A. Pontiac
 Miller, Raymond E. Clarkston
 Mitchell, B. M. Pontiac
 Mooney, C. A. Ferndale
 Morrison, J. S. Royal Oak
 Murtha, A. V. Pontiac
 Neafie, Chas. A. Pontiac
 Norup, John Berkley
 Ohlmacher, A. P. Royal Oak

Olsen, Richard E. Pontiac
 Pauli, Theodore H. Pontiac
 Pool, H. H. Pontiac
 Prevette, Isaac C. Pontiac
 Raynale, George P. Birmingham
 Reid, F. T. Clawson
 Riker, Aaron D. Pontiac
 Rochm, Harold R. Birmingham
 Rooks, Wendell H. Pontiac
 St. John, Harold A. Pontiac
 Scott, Francis A. Rochester
 Seaborn, A. J. Royal Oak
 Shearer, John P. Pontiac
 Sheffield, L. C. Pontiac
 Sherman, G. A. Pontiac
 Sibley, H. A. Pontiac
 Simpson, E. K. Pontiac
 Spears, M. L. Pontiac
 Spencer, Lloyd H. Royal Oak
 Spoehr, Eugene L. Ferndale
 Stahl, Harold E. Oxford
 Stanley, Wm. F. Ferndale
 Starker, Clarence T. Pontiac
 Steinberg, Norman Royal Oak
 Stolpman, A. K. Birmingham
 Strain, C. S. Rochester
 Sutherland, Clark J. Clarkston
 Sutton, Palmer E. Royal Oak
 Terry, Stuart. Pontiac
 Tuck, R. G. Pontiac
 Volk, V. Saginaw
 Wagley, P. V. Pontiac
 Wagner, Ruth E. Royal Oak
 Wiers, W. W. Royal Oak
 Williams, H. W. Pontiac
 Yoh, Harry B. Pontiac
 Young, Arthur R. Pontiac

OCEANA COUNTY

Day, Clinton Hart
 Hayton, A. R. Shelby
 Heard, William Pentwater
 Heysett, N. W. Hart

Jensen, Viggo Shelby
 Lemke, Walter M. Shelby
 Munger, L. P. Hart

Nicholson, John H. Hart
 Reetz, Fred A. Shelby
 Wood, Merle G. Hart

ROSTER MICHIGAN STATE MEDICAL SOCIETY

O. M. C. O. R. O.

(Otsego-Montmorency-Crawford-Oscoda-Roscommon-Ogemaw)

Beeby, R. J.....West Branch
Clippert, C. G.....Grayling
Crandell, C. H.....West Branch
Ford, Ruey O.....Gaylord
Jardine, Hugh.....West Branch

Keyport, C. R.....Grayling
Lee, F. W.....Fairview
Martzowka, M. A.....Roscommon
McDowell, A. S.....West Branch
McDowell, Douglas.....West Branch

McKillop, G. L.....Gaylord
Peckham, Richard.....Gaylord
Rifenberg, F. G.....Gaylord
Stealy, Stanley.....Grayling

ONTONAGON COUNTY

Bender, Jesse L.....Mass
Evans, Edwin J.....Ontonagon

Hogue, H. B.....Ewen
McHugh, Frank W.....Ontonagon

Strong, W. F.....Ontonagon
Whiteshield, C. F.....Trout Creek

OTTAWA COUNTY

Beernink, E. H.....Grand Haven
Bloemendaal, D. C.....Zeeland
Bloemendal, W. B.....Grand Haven
Boone, Cornelius E.....Zeeland
Bos, G. D.....Holland
Clark, N. H.....Holland
DeWitt, S. L.....Grand Haven
Harms, H. R.....Holland
House, M. E.....Holland
Huizinga, John G.....Holland
Irvin, H. C.....Holland

Kemme, Gerrit.....Zeeland
Kools, Wm. Clarence.....Holland
Leenhouts, Abraham.....Holland
Lickley, Iva.....Grand Haven
Long, C. E.....Grand Haven
Mulder, C. D.....Spring Lake
Nichols, Rudolph H.....Holland
Presley, Wm. J.....Grand Haven
Stickley, A. E.....Coopersville
Tappan, W. M.....Holland

Ten Have, Ralph.....Grand Haven
Timmerman, E. C.....Coopersville
Ver Duin, J.....Grand Haven
Van Der Berg, E.....Holland
Van der Velde, O.....Holland
Wells, Kenneth.....Spring Lake
Westrate, William.....Holland
Wiersma, Silas C.....Hudsonville
Winters, John K.....Holland
Winters, Wm. G.....Holland

SAGINAW COUNTY

Alger, G. L.....Saginaw
Anderson, W. K.....Saginaw
Bagley, U. S.....Saginaw
Bagshaw, David E.....Saginaw
Beckwith, Bertram H.....Saginaw
Bennett, R. B.....St. Charles
Berberovitch, T. F.....Saginaw
Bishop, H. M.....Saginaw
Brender, Fred P.....Frankenmuth
Brock, W. H.....Saginaw
Butler, M. G.....Saginaw
Button, A. C.....Saginaw
Cady, F. J.....Saginaw
Cameron, Allen K.....Saginaw
Campbell, L. A.....Saginaw
Clark, Wilbert B.....Saginaw
Cortopassi, Andre.....Saginaw
Durman, Donald.....Saginaw
Ely, C. W.....Saginaw
English, William F.....Saginaw
Ernst, Arthur Randolph.....Saginaw
Eymmer, Esther.....Saginaw
Fleschner, Thomas E.....Birch Run
Freeman, Frederick W.....Saginaw
Galsterer, E. C.....Saginaw
Gay, Harold Howard.....Saginaw
Goman, Louis D.....Saginaw
Grigg, Arthur.....Saginaw
Hart, Virgil C.....Saginaw
Harvie, L. C.....Saginaw
Helmkamp, Herbert O.....Saginaw
Hester, E. G.....Saginaw

Hill, Victor L.....Saginaw
Hohn, F. J.....Saginaw
Hyslop, L. F.....Saginaw
Imerman, Harold M.....Saginaw
Jaenichen, R.....Saginaw
James, J. W.....Saginaw
Jiroch, R. S.....Saginaw
Kahn, Paul.....Frankenmuth
Keller, S. S.....Saginaw
Kemp, J.....Saginaw
Kempston, R. M.....Saginaw
Kirchgeorg, Clemens G.....Frankenmuth
Kleekamp, H.....Saginaw
Knott, Harriet A.....Saginaw
Leitch, Arthur E.....Saginaw
Ling, Ernest M.....Hemlock
Lohr, O. W.....Saginaw
Longstreet, Martha L.....Saginaw
Luger, F. E.....Saginaw
MacKinnon, Edwin D.....Saginaw
Markey, Jos. P.....Saginaw
Martzowka, Wm. P.....Saginaw
Maurer, John A.....Saginaw
McClinton, N. F.....Saginaw
McGregor, R.....Saginaw
McKinney, Alex R.....Saginaw
McLandress, Joshua A.....Saginaw
McMeekin, James W.....Saginaw
Meyer, Henry J.....Saginaw
Moon, A. R.....Saginaw
Morris, Keith M.....Saginaw

Morse, W. F.....Saginaw
Mudd, Richard D.....Saginaw
Murphy, Albert P.....Saginaw
Murray, Chas. R.....Saginaw
Novy, F. O.....Saginaw
O'Reilly, Wm. J.....Saginaw
Ostrander, Frank W.....Freeland
Pillsbury, Edward A.....Frankenmuth
Poole, Frank A.....Saginaw
Potvin, Clifford D.....Merrill
Powers, Julius H.....Saginaw
Richter, Emil P. W.....Saginaw
Rosenberg, Robert.....Saginaw
Rubin, H.....Saginaw
Ryan, M. D.....Saginaw
Ryan, R. S.....Saginaw
Sample, Chester H. (Honorary).....Saginaw
Sample, J. T.....Saginaw
Schaiberger, Elmer.....Saginaw
Sheldon, S.....Saginaw
Slack, Walter K.....Saginaw
Thomas, Dale.....Saginaw
Tiedke, G. E.....Saginaw
Toshach, C. E.....Saginaw
Wallace, H. C.....Saginaw
Wheeler, Dorothy.....Saginaw
Wilson, Roy H.....Saginaw
Windham, Pearl S.....Saginaw
Wixted, John F.....Chesaning
Wixted, Julia L.....Chesaning
Yntema, S.....Saginaw

SAINT CLAIR COUNTY

Armsbury, A. B.....Marine City
Atkinson, J. M.....Port Huron
Attridge, J. A.....Port Huron
Battley, J. C. Sinclair.....Port Huron
Borden, C. L.....Yale
Boughner, W. H.....Algonac
Bovee, M. E.....Port Huron
Brush, Howard O.....Port Huron
Burke, Ralph M.....Port Huron
Burley, Jacob H.....Port Huron
Callery, A. L.....Port Huron
Campbell, R. H.....St. Clair
Carney, F. V.....St. Clair
Cooper, T. H.....Port Huron
DeGurse, W. E.....Marine City
Derck, W. P.....Marysville

Engelman, A. A.....St. Clair
Fraser, Robert C.....Port Huron
Heavenrich, Theodore F.....Port Huron
Holcomb, R. J.....Marine City
Johnson, Howard R.....Capac
Kest, Geo. Matthew.....Port Huron
LeGalley, K. B.....Port Huron
Ludwig, F. E.....Port Huron
McCue, Crystal C.....Goodells
MacKenzie, Alexander J.....Port Huron
MacPherson, C. A.....St. Clair
Martinson, J. E.....Port Huron
McColl, D. J.....Port Huron
McColl, Neil J.....Port Huron
Meredith, E. W.....Port Huron
Patterson, D. Webster.....Port Huron

Pollack, Donald A.....Yale
Reynolds, Annie E.....Port Huron
Ryerson, W. W.....Port Huron
Schaefer, W. A.....Port Huron
Sites, E. C.....Port Huron
Smith, Reginald.....Port Huron
Thomas, C. F.....Port Huron
Vroman, M. E.....Port Huron
Waltz, J. F.....Capac
Ware, John R.....Port Huron
Wass, Henry C.....St. Clair
Waters, George.....Port Huron
Wellman, Joseph E.....Port Huron
Wight, William G.....Yale
Zemmer, Adrian L.....Port Huron

SAINT JOSEPH COUNTY

Fiegel, S. A.....Sturgis
Hoekman, Aben.....Constantine
Kane, David M.....Sturgis
Miller, C. G.....Sturgis
O'Dell, J. H.....Three Rivers

Parrish, Marion F.....Sturgis
Pennington, H. C.....White Pigeon
Rice, John W.....Sturgis
Shaw, G. D.....Mendon
Sheldon, J. P.....Sturgis

Slote, L. K.....Constantine
Springer, R. A.....Centerville
Sweetland, G. J.....Constantine
Weir, D. C.....Three Rivers
Wilkerson, Nina C.....Sturgis

ROSTER MICHIGAN STATE MEDICAL SOCIETY

SCHOOLCRAFT COUNTY

Broberg, Gail.....Manistique
Fyvie, James.....Manistique
Michalenko, Edward J.....Manistique

Ross, Donald.....Manistique
Shaw, George A.....Manistique

Tucker, A. R.....Manistique
Goss, Samuel B.....Manistique

SHIAWASSEE COUNTY

Alexander, Reuben G.....Laingsburg
Arnold, Jr., Alfred L.....Owosso
Arnold, Sr., A. L.....Owosso
Bates, L. F.....Durand
Braunsdorf, R. L.....Owosso
Brown, Richard J.....Owosso
Carney, Edward J.....Durand
Cramer, George G.....Owosso
Crane, C. A.....Corunna
Fillinger, W. B.....Ovid

Greene, I. W.....Owosso
Hartgraves, Hallie.....Frankfort
Haviland, James J.....Owosso
Hume, Arthur M.....Owosso
Hume, Harold A.....Owosso
Linden, V. E.....Durand
McKnight, E. R.....Owosso
Parker, W. T.....Owosso
Pochert, R. C.....Owosso
Richards, C. J.....Durand

Sackrider, Geo. P.....Owosso
Soule, Glenn T.....Henderson
Taylor, W. M.....Ovid
Wade, G. B.....Laingsburg
Ward, Walter E.....Owosso
Watts, Fred A.....Owosso
Weinkauf, W. F.....Corunna
Wilcox, Anna L.....Owosso
Wilcox, C. M.....Owosso

TUSCOLA COUNTY

Barbour, Harry A.....Mayville
Bates, George.....Kingston
Cook, Raymond.....Akron
Dickerson, W.....Wahjamega
Donahue, Theron.....Cass City
Frankfurth, Vincent T.....New York, N. Y.
Gugino, Frank James.....Reese
Handy, J. E.....Caro
Hoffman, T. E.....Vassar
Howlett, R. R.....Caro

Johnson, O. G.....Mayville
Kaven, G. H.....Unionville
Kralick, Louise C.....Wahjamega
MacRae, L. D.....Gagetown
Maurer, J. G.....Reese
Meister, Franklin O.....Minneapolis, Minn.
McCoy, Ira Dean.....Bad Axe
Merrill, Elmer H.....Caro
Morris, Frank L.....Cass City
Petrie, William.....Caro

Preston, Otto.....Wahjamega
Rundell, Annie Stevens.....Vassar
Ruskin, D. B.....Fairgrove
Salot, D. G.....Millington
Savage, Lloyd.....Caro
Spohn, U. G.....Fairgrove
Starmann, Bernard.....Cass City
Swanson, E. C.....Vassar
Vatz, Jack A.....Millington
Von Renner, Otto.....Vassar
Vail, Harry F.....Unionville

WASHTENAW COUNTY

Alexander, John.....Ann Arbor
Adams, James P.....Ann Arbor
Arner, Fred L.....Ann Arbor
Badgley, Carl.....Ann Arbor
Barker, Paul.....Ann Arbor
Barnwell, John.....Ann Arbor
Barr, A. S.....Ann Arbor
Barss, Harold D.....Ypsilanti
Bartlett, R. M.....Ann Arbor
Bassow, Paul.....Ann Arbor
Bell, Margaret.....Ann Arbor
Belote, G. H.....Ann Arbor
Belsler, Walter.....Ann Arbor
Bigelow, Robert Barry.....Boston, Mass.
Blair, Thomas.....Ann Arbor
Boys, Floyd.....Ann Arbor
Breakay, James R.....Ypsilanti
Breakay, J. F.....Ann Arbor
Britton, H. B.....Ypsilanti
Brown, Phillip.....Ypsilanti
Brownell, Durwin.....Ann Arbor
Bruce, James D.....Ann Arbor
Buenaventura, Jiminez.....Ann Arbor
Bugher, John C.....Ann Arbor
Camp, Carl Dudley.....Ann Arbor
Clements, Glenn T.....Ann Arbor
Coller, F. A.....Ann Arbor
Combs, Arnold B.....Ann Arbor
Conrad, Jr., George.....Ann Arbor
Cowie, D. M.....Ann Arbor
Cummings, H. H.....Ann Arbor
De Jong, Russell.....Ann Arbor
De Tar, John S.....Milan
Donaldson, S. W.....Ann Arbor
Durfee, M. L.....Ann Arbor
Echols, Dean.....Ann Arbor
Edmunds, Charles W.....Ann Arbor
Emerson, Herbert W.....Ann Arbor
Failing, Joseph H.....Ann Arbor
Field, Jr., Henry.....Ann Arbor
Folsome, Clair Edwin.....Ann Arbor
Forsythe, W. E.....Ann Arbor
Frailick, F. Bruce.....Ann Arbor
Freyberg, Richard H.....Ann Arbor
Frye, Carl H.....Ann Arbor
Furstenberg, Albert C.....Ann Arbor
Ganzhorn, Edwin.....Ann Arbor

Gardiner, Sprague.....Ann Arbor
Gates, John L.....Ann Arbor
Gates, Neil A.....Ann Arbor
Gulde, Andros.....Chelsea
Hannum, M. R.....Milan
Harris, Bradley M.....Ypsilanti
Haynes, Harley A.....Ann Arbor
Himler, Leonard E.....Ann Arbor
Holland, Charles F.....Ann Arbor
Howard, S. C.....Ann Arbor
Inch, George F.....Ypsilanti
Isaacs, Raphael.....Ann Arbor
Johnson, Lester J.....Ann Arbor
Johnson, V. C.....Ann Arbor
Kahn, Edgar A.....Ann Arbor
Kemper, J. W.....Ann Arbor
Kleinschmidt, Earl E.....Ann Arbor
Kleinschmidt, Gladys.....Ann Arbor
Klingman, Theophil.....Ann Arbor
Knoll, Leo.....Ann Arbor
Kretzschmar, Norman.....Ann Arbor
LaFever, Sidney L.....Ann Arbor
Langford, Theron S.....Ann Arbor
Lichty, Dorman E.....Ann Arbor
Lilly, Coral Adelbert.....Ann Arbor
McEachern, Thomas H.....Ann Arbor
Mackenzie, Aileen McQuinn.....Ypsilanti
Maddock, Walter G.....Ann Arbor
Malcolm, Karl D.....Ann Arbor
Malcolm, Russell L.....Ann Arbor
Marshall, Don.....Ann Arbor
Marshall, Evelyn W.....Ann Arbor
Marshall, Mark.....Ann Arbor
Maxwell, J. H.....Ann Arbor
Metzger, Ida.....Ann Arbor
Miller, Harold.....Saline
Miller, Norman F.....Ann Arbor
Muehlig, George F.....Ann Arbor
Myers, Dean W.....Ann Arbor
Nesbit, Reed M.....Ann Arbor
Newburgh, L. H.....Ann Arbor
Oliphant, L. W.....Ann Arbor
Paton, Thomas W.....Ypsilanti
Patterson, Ralph M.....Ypsilanti
Peet, Max.....Ann Arbor
Peirce, Carleton B.....Ann Arbor
Pillsbury, Charles B.....Ypsilanti

Pinkus, Herman.....Eloise
Pollard, H. M.....Ann Arbor
Prout, Gordon H. J.....Saline
Raphael, Theophile.....Ann Arbor
Reekie, Richard D.....Ann Arbor
Riecker, H. H.....Ann Arbor
Ross, Howard.....Ann Arbor
Sacks, Wilma.....Ann Arbor
Samson, Paul C.....Ann Arbor
Schnute, Louise F.....Chicago, Ill.
Scott, Wm. A.....New York, N. Y.
Schumacher, W. E.....Ann Arbor
Sheldon, John M.....Ann Arbor
Sink, Emory W.....Ann Arbor
Smalley, Marianna.....Ann Arbor
Smith, N. M.....Ann Arbor
Snow, Glenadine.....Ypsilanti
Solis, Jeanne C.....Ann Arbor
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Steiner, L. G.....Ann Arbor
Stocking, Bruce.....Ann Arbor
Stryker, Homer H.....Ann Arbor
Sturgis, Cyrus C.....Ann Arbor
Sundwall, John.....Ann Arbor
Teed, Reed Wallace.....Ann Arbor
Teitelbaum, Myer.....Ann Arbor
Thieme, M. Thurston.....Ann Arbor
Todd, Oliver E.....Ann Arbor
Towsley, Harry A.....Ann Arbor
Wager, Spencer.....Ann Arbor
Waggoner, R. W.....Ann Arbor
Waldron, Fred R.....Ann Arbor
Wallace, J. B.....Saline
Wanstrom, Ruth.....Ann Arbor
Washburne, Charles L.....Ann Arbor
Weller, C. V.....Ann Arbor
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Yoder, O. R.....Ypsilanti

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Altshuler, S. S.....Detroit

Amberg, Emil.....Detroit
Amolsch, Arthur L.....Detroit
Amos, Thomas G.....Detroit
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Bailey, L. J.	Detroit	Brown, Henry S.	Detroit	Cole, James E.	Detroit
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 Williams, Clarence J.....Detroit
 Williams, Mildred C.....Detroit
 Wills, J. N.....Detroit
 Willson, Wesley W.....Detroit
 Wilson, F. S.....Detroit
 Wilson, G. A.....Detroit
 Wilson, M. C.....Detroit
 Wilson, Stuart.....Detroit
 Wilson, Walter J.....Detroit
 Wilson, Jr., Walter J.....Detroit
 Winsor, Carlton Webb.....Detroit
 Wishropp, Edward A.....Detroit
 Wissman, H. C.....Detroit
 Wittenberg, Arthur A.....Detroit
 Wittenberg, S. S.....Detroit
 Witter, Frank C.....Detroit
 Witter, Joseph A.....Detroit
 Wittus, M.....Detroit
 Wittwer, Eldwin Roy.....Detroit
 Wollenberg, Robert C.....Detroit
 Woods, H. B.....Detroit
 Woodry, Norman L.....Detroit
 Woods, W. E.....Detroit
 Woodworth, Wm. P.....Detroit
 Wreggitt, Winston R.....Detroit
 Wright, C. C.....Detroit
 Wruble, Joseph.....Detroit
 Wygant, Thelma M.....Detroit
 Yates, H. W.....Detroit
 Yoakam, W. A.....Detroit
 Yott, William J.....Detroit
 Young, Don A.....Detroit
 Young, Donald C.....Detroit
 Young, James P.....Detroit
 Young, L. B.....Detroit
 Young, Viola M.....Detroit
 Zbudowski, Alexander.....Detroit
 Zimmer, L. L.....Detroit
 Zimmerman, R. L.....Detroit
 Zinn, George H.....Detroit
 Zolliker, C. R.....Detroit

WEXFORD COUNTY

Albi, R. W.....Lake City
 Brooks, G. W.....Tustin
 Buster, H. C.....Baldwin
 Carrow, J. F.....Marion
 Gruber, John F.....Cadillac
 Hager, Ralph.....Manton
 Hendricks, H. V.....Kalkaska

Holm, Augustus.....Leroy
 Holm, Benton A.....Cadillac
 Hoverter, J. W.....Evart
 Laughbaum, T. R.....Lake City
 McCall, J. H.....Lake City
 McManus, Edwin.....Mesick
 Mills, Robert E.....Boon

Moore, S. C.....Cadillac
 Moore, G. P.....Cadillac
 Murphy, Michael R.....Cadillac
 Purdy, Calvin S.....Buckley
 Showalter, Laurence E.....Cadillac
 Smith, Wallace J.....Cadillac
 Wood, G. H.....Luther

THE JOURNAL

OF THE

Michigan State Medical Society

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MAY, 1937

*"Every man owes some of his time to the up-
 building of the profession to which he belongs."*

—THEODORE ROOSEVELT.

EDITORIAL

SOCIALISTIC TREND IN LEGISLATION

WE HAVE before us a copy of the Senate Bill 855 introduced by Senator Capper and referred to the financial committee. The bill provides for a state system of health insurance and a fund for its maintenance "equal to at least six per cent of the total of all wages periodically paid by employers to employees." Those eligible for this state health insurance are employees under sixty-five years of age, whose wages are sixty dollars a week or less. There is a provision for those who do not come within the compulsory health insurance law to secure the same services voluntarily, somewhat on the basis of regular health insurance, inasmuch as those outside the scope of the insurance law may obtain all its so-called benefits by acceptance through satis-

factory health examination; or, we presume rejection will result if the health examination is not satisfactory.

The Senate Bill 855 makes provision for "fixing the manner of remunerating physicians and dentists in general practice, surgeons and other medical and dental specialists, pharmacists, nurses, hospitals, clinics, laboratories and other persons and agencies furnishing medical benefits." To quote further: "Any one of the following modes may be adopted for remunerating physicians and dentists in general practice—(1) a salary system; (2) a per capita system whereunder payment will be based on the number of persons entitled to medical benefits included in the practitioner's list; (3) a fee system whereunder payment will be based on the extent and character of the treatment given and services rendered by the practitioner to persons entitled to medical benefits; and (4) any combination or modification of the systems hereinabove stipulated."

The bill goes into particulars, as is necessary with all proposed legislation. The chief points of interest, however, are that its scope includes a very large part of the population for whom the state would not concern itself with such basic necessities as shelter, clothes, food and fuel; that it makes provision for voluntary participation in the benefits of the law to those whose incomes are more than sixty dollars a week and who are over sixty-five years of age, by submitting to a physical examination. And it furthermore places doctors and others concerned in medical care on a controlled schedule as regards remuneration.

Whatever may be the outcome of this particular bill, it behooves every member of the medical profession to be alive to the type of legislation which is being proposed to control his professional career. Socialism does not imply freedom. It means a class or group whose duty it is to plan and make rules and a much larger group who must obey; or as Walter Lipmann has very aptly expressed it, "There must be a hierarchy of officers, or, if you like, officials and a rank and file of privates. The officers must command. The privates must obey. In place of argument, persuasion, bargaining and compromise among individuals, there must be orders and the disciplined acceptance of those orders."

MEMBERSHIP OF THE MICHIGAN STATE MEDICAL SOCIETY

ELSEWHERE in this number of the JOURNAL appears the membership list of the Michigan State Medical Society. A perusal of this roster will reveal the names of those who are members of the various county medical societies and the Michigan State Medical Society. There are many eligible physicians whose names are not in these columns. They are probably waiting for an invitation. This is the first time in the history of the Michigan State Medical Society that the entire membership list has been published. It is hoped that all eligible physicians not now members of their various county societies will seek active membership so that their names and addresses may be included in the next (perhaps yearly) revision of the list of members.

There are many reasons why every practicing physician should be a member of his county society. The social and intellectual contact with fellow members of the profession has a salutary influence on all. There is no standing still in medicine. One either retrogresses, when what medical training he ever had fades with the years, or he progresses. In a sentence, the membership in the medical society means live, progressive practice of medicine.

BASIC SCIENCE BILL

AS THIS is being written, the Basic Science Bill has been passed by the House and is now before the Senate.

There probably has never been any measure of any kind proposed and submitted for the consideration of any legislature in the English speaking world which is so free from valid objections. This statement is made having in mind not the viewpoint of the medical profession or of sectarian healers; the viewpoint is that of the thoughtful layman not connected directly with any of the healing professions. It is meritorious in every way, if for no other reason than it assures the person who may become a patient that the practitioner he calls in has met certain requirements in those studies which are the foundation of all medical and therapeutic knowledge.

It is fair because it interferes with the

so-called vested rights of no doctor, osteopath or chiropractor, or any one else now engaged in the care of the sick. It is fair also because it does not discriminate. No candidate for the Basic Science Certificate is required to make known what school of healing he purposes afterwards to attend. Its passing would be a fair measure on the part of the state which for over thirty-eight years has insisted on certain standards in medicine in its two institutions, the medical schools of the University of Michigan and Wayne University. It is only fair that all candidates should be required to meet at least the basic standards that the state has already demanded of those who look forward to medicine.

Every thoughtful layman who has taken pains to acquaint himself with the details of the Basic Science Bill has pronounced it a truly excellent measure.

OCCUPATIONAL DISEASE

IN THE April number of this JOURNAL appeared in full the programs of two very important conferences which dealt with the general subject of Occupational Disease. In view of the tendency of legislation to include occupational disease in the same category as accidents acquired by working men in pursuit of their occupation, the subject is one that should concern every member of the medical profession, even though he may not be directly employed by industry. For instance, there is not much difference between industrial accident surgery and accident surgery in which industries are not concerned. This fact makes the scientific discussions, which took place at the recent conference, of interest to the profession at large.

Occupational disease has been defined as "A disease peculiar to the occupation in which the employee was engaged and due to causes in excess of ordinary hazards of employment as such."* No doubt, the passage of an occupational disease bill will evoke decisions from the Michigan courts; this may be anticipated. In the event of the Occupational Disease Law, it may be some time before a legal definition will fix the exact status of diseases acquired in each

*Court Decision on Public Health, Pub. Health Rep. 51:1506, (Oct. 30) 1936. Quoted by the *Journal of the American Medical Association*, March 20, 1937.

peculiar occupation. We are not, however, concerned immediately with the legal phases of the subject. Parenthetically, however, the drafting of an occupational disease bill should be accomplished only with the advice and direction of the medical profession. The scientific and clinical aspects, however, are of paramount importance.

QUOT HOMINES TOT SENTENTIÆ

A YEAR and a half ago the American Foundation undertook to get an expression of opinion from the doctors themselves on the medical situation in the United States. Six letters were written to 2,500 physicians and surgeons in actual practice, and teaching and other salaried positions. The original letter of inquiry was sent to men of more than twenty years' experience. The letter asked for an informal and confidential reply, which replies have been kept confidential so far as not connecting the writer's name with the opinion or view expressed.

The result is a two-volume report of nearly 1,500 pages in which extracts from the thousands of letters received are arranged according to the subjects and opinions expressed. The title of the two-volume report is *American Medicine, Expert Testimony Out of Court*. The original letter read in part as follows: "We are not presenting to you any formal inquiries or any 'questionnaire' since we somewhat distrust the usefulness of such a method." What was asked was the writer's view based on his experience, of any essential changes needed in the present organization of medical services.

The very latitude of the subject has lead to all sorts of replies. Evidently according to many of the writers, something is wrong, we had almost said, with everything except his own part in the scheme of things. In many of the replies, it is almost a case of washing professional linen in public. The appendix lists the names and professional background of each, but as mentioned there is no clue as to the identity of the writer with the particular opinion quoted.

While opposing state medicine, many favor the socializing of diagnostic aids to medicine, the x-ray and clinical laboratory. State medicine, so-called, has its advocates.

The subject of specialization comes in for censure. The consensus is against the poorly or inadequately trained self-styled specialist. Opinions are expressed against the alleged practice of fee splitting and the subterfuges to conceal it. State medicine and health insurance are discussed at great length; also the questions, "Are there too many doctors? Should the number of graduates from medical colleges be limited?" The cost of hospital care also comes in for criticism. Going over the contents of these volumes, it is difficult to discover any omissions in the discussion of anything that has to do with the care of the sick in its broad aspects.

The grouping of opinions and prefaced introductions by the compiler are particularly unbiased and all inclusive. Every conceivable view, pro and con, is expressed. Truly is the physician an individualist—*many men of many opinions*.

OOT INTIL THE COUNTRY

Oh, it's oot intil th' country where th' cherry blossoms grow,
An' th' wee lambs hae their frolic on th' meadow by th' sea,
Where th' buttercups an' daisies bloom alang th' heather row
An' we hear th' chirp o' robins an' th' hummin' o' th' bee,
An' th' whinny o' th' colties as they're rinnin' to an' fro,
Alang side o' their mither's that's sae happy an' sae free,
An' where lily ponds are bloomin', soft an' white as driven snow,
Oh, it's oot intil th' country, I am langin' for tae be.

Oh, it's oot intil th' country where th' windin' rivers flow,
Where we smell th' clover blossoms an' th' scent of new-mown hay,
Where th' corn is green an' wavin' in th' breezes as they blow,
Where th' apple orchard's shady for th' bairnies as they play,
An' th' windmill, auld an' creaky, fills th' waterin' trough below
Wi' a cool an' sparklin' nectar frae th' rock below th' clay,
An' th' sunshine shines in splendor an' th' earth is a' aglow,
Oh, it's oot intil th' country that I'd like tae be th' day.

WEELUM.

Less Worry

"To what do you attribute your remarkable health?"

"Well," replied the very old gentleman, "I reckon I got a good start on most people by bein' born before germs were discovered, thereby havin' less to worry about."—*Exchange*.

President's Page

OCCUPATIONAL DISEASE LEGISLATION

THE State Legislature is still grinding out a few new laws and amending and repealing old ones.

To date, there have been three bills introduced which cover the subject of occupational diseases. House Bill No. 63 is an all-inclusive bill. Senate Bill 106, an all-inclusive bill when it started on its journey in the Senate, finally reached the House as a schedule-type bill listing 31 diseases. House Bill 192 was drafted by a Commission appointed by Governor Frank Fitzgerald, and favored by Governor Frank Murphy in his inaugural address. This bill includes the following diseases: anthrax; asbestosis; bone felon; bursitis; cataract in glass workers; chrome ulceration; compressed air illness; destruction of tissue by radium or x-ray; epitheliomatous cancer or ulceration of skin or cornea; glanders; infection from blisters; inflammation of skin or eyes due to oils, etc.; silicosis; tuleremia; poisoning by any of the following: arsenic, benzol, carbon bisulphite, carbon monoxide, halogenated hydro-carbons, lead, manganese dioxide, mercury, menthol, methyl-chloride, naphtha, nickel carbanyl, phosphorus.

The Michigan State Medical Society is watching this proposed legislation very carefully as the subject has important medical implications, both immediate and in the future. The Advisory Committee on Occupational Diseases of the Michigan State Medical Society has offered its help and technical advice to the House Labor Committee. The State Society will do all in its power to aid the passage of an Occupational Disease Bill which will be fair and impartial to all groups concerned. Individual physicians are urged to contact the House Labor Committee and urge its favorable consideration of an Occupational Disease Bill which will list those diseases to which a Michigan working-man or woman is subject.



President of the Michigan
State Medical Society

DEPARTMENT OF SOCIETY ACTIVITY

L. FERNALD FOSTER, M.D., Secretary

THE STATE SOCIETY

THE Michigan State Medical Society exists only in so far as the individual practitioner exists. Too often we think of the State Society as a separate and distinct entity from its component county units and their individual members. For plans and projects of the State Society to be successful there must be activity and interest in these endeavors manifested by each of its nearly four thousand members. During this year we recognize unusual activity sponsored by the State Medical Society. We have experienced an unusual legislative program; we have seen widespread committee activities—activities in the socio-economic endeavors and activities along the lines of scientific medical advancement.

When we take an inventory of these activities what will it disclose? It will disclose successful achievement only if and when each physician has assumed his individual responsibility. The aggregate of these assumed responsibilities will be your State Society's results.

Your committees and officers are constantly evolving plans and programs for the benefit of every physician in Michigan. These individuals need your counsel and advice, they need your constructive criticisms and they need your earnest and sincere coöperative effort if the traditions of the medical profession are to be maintained and if the ever-increasing socio-economic problems of organized medicine are to be solved wisely.

The State Society is YOU and each of your four thousand colleagues. The call to you individually is for wise counsel, tolerant consideration and active execution.

L. FERNALD FOSTER, M.D.,
Secretary.

MINUTES OF MEETING OF EXECUTIVE COMMITTEE OF THE COUNCIL

March 17, 1937

1. *Roll Call.*—The meeting was called to order by Dr. P. R. Urmston, Chairman, of Bay City, in the City Club, Lansing, at 3:20 p. m. Those present included: Dr. Urmston, Bay City; Dr. Henry R. Carstens, Detroit; Dr. A. S. Brunk, Detroit; Dr.

T. F. Heavenrich, Port Huron; Dr. I. W. Greene, Owosso. Also present: Dr. Henry E. Perry, Newberry, President of the M.S.M.S.; Dr. Henry Cook, Flint; Dr. James H. Dempster, Detroit; Dr. L. Fernald Foster, Bay City; Executive Secretary Wm. J. Burns. Absent: Dr. F. E. Reeder, Flint (ill).

2. *Minutes.*—The minutes of the meeting of the Executive Committee of February 8 were approved as printed, and distributed to the members.

3. *Financial Report.*—The financial report for the month of February covering the condition of the M.S.M.S. and THE JOURNAL was presented. Bills payable for the month were presented, and on motion of Drs. Carstens-Heavenrich approved and ordered paid.

4. *Report of Legislative Committee.*—This report was presented by Chairman L. G. Christian, and included a résumé of activities to date on the Occupational Disease Bill, the Welfare and Relief Bills, and the Basic Science Bill.

5. *Report of Syphilis Control Committee.*—This report from Chairman Loren W. Shaffer, was read and discussed. Motion of Drs. Carstens-Brunk that the Secretary confer with Health Commissioner Slemons and with Dr. Shaffer regarding the Michigan Program for Syphilis Control, after which they are to confer with Dr. Thomas Parran of the U. S. Public Health Service, advising him that the Michigan State Medical Society is ready to proceed with the Michigan Program for Syphilis Control. Carried unanimously.

6. *Fee Schedules A, B, C, D.*—Report was given on the meeting of the M.S.M.S.—M.H.A.—M.A.R. Committee with the Finance Committee of the State Administrative Board in Lansing on March 9. The Executive Secretary was instructed to ascertain from the Crippled Children Commission what appropriations were desired by the Commission for the next biennial period, and to advise Dr. Grover C. Penberthy, Dr. H. H. Cummings, Dr. E. R. Witwer and his Committee, and Dr. Henry Cook.

7. *Allied Health Council.*—A report on the two meetings of Dr. R. G. Tuck and members of the allied groups (physicians, dentists, nurses, pharmacists and funeral directors) was given, and progress was reported.

8. *Capper Bill.*—A letter from the Bureau of Legal Medicine of the American Medical Association was read, relative to the Capper Bill in the United States Congress.

9. *Relief and Welfare Legislation.*—A progress report was given on the medical phases of relief and welfare legislation, and Senate Bills 111-112 were discussed. Motion of Drs. Brunk-Carstens that the amendment as proposed to Senate Bill 111-112 be given approval, was unanimously carried. Motion of Drs. Greene-Brunk that the Michigan State Medical Society respectfully request Governor Murphy to appoint a physician to the Welfare Commission when that Commission is to be formed after passing of the welfare bills. Motion carried unanimously.

10. *Model Constitution for County Medical Societies.*—This Model Constitution and By-Laws as drafted by Dr. George McL. Waldie's committee, was presented, and on motion of Drs. Brunk-Greene was referred to Secretary Foster and Chairman of the Council Urmston for study. Copies of the pro-

COUNTY SOCIETIES

CALHOUN COUNTY

WILFRID HAUGHEY, M.D.
Secretary

The March meeting of the Calhoun County Medical Society was called to order at the Athelstan Club at 8:00 p. m. Tuesday, March 2, 1937, by President Brainard.

The minutes of the last meeting were approved as printed in the Bulletin.

The secretary read a communication from the State Society regarding basic science laws, group hospital association laws and the recent meeting of the county secretaries' association, the work of the Public Relations Committee, and the Preventive Medicine Committee.

Dr. Kinde reported on a meeting recently held by himself with the health office, Dr. A. A. Hoyt, the president, Dr. Brainard, and the president of the Battle Creek Academy of Medicine and Dentistry, Dr. Dugan, and others, relative to an immunization program to be carried out by the doctors in cooperation with the health unit and health officials. Details will be sent the members by letter soon.

Dr. Kenneth Lowe reported for the Radio Committee. The programs are being given and will continue to a total of about 18. The radio station say they would be glad to give us the time on account of the nature of the programs, but cannot. However, Dr. Lowe suggested a dollar contribution from each one would take care of the whole matter, which is a favorable rate when you consider their charge is \$25 for 15 minutes. A similar arrangement can be made for next year.

Dr. George W. Slagle was asked to introduce the speaker. Dr. Slagle did so stating that this research was the result of a grant from Mr. Kettering, of General Motors.

Dr. H. Worley Kendell of Miami Valley Hospital, Dayton, Ohio, showed four reels of films, giving the history and development of Heat Therapy, demonstrating treatments, and showing patients before and after.

The meeting adjourned. Attendance at dinner, forty-three; at meeting, sixty-two.

EATON COUNTY

THOMAS WILENSKY, M.D.
Secretary

The regular monthly meeting of the Eaton County Medical Society was held at the Carne's Tavern, Charlotte, on the evening of Thursday, March 25. Following dinner, the meeting was immediately turned over to the speaker, Dr. Walter L. Finton, of Jackson, Michigan, who discussed in masterful fashion, "The Diagnosis and Treatment of Diseases of the Gall Bladder." The speaker dwelt significantly on the differential diagnosis of diseases of the gall bladder and stated that many cases went undiagnosed for long periods of time. Medical management, said Dr. Finton, should be exhibited in every non-calculous case skillfully and thoroughly. Where there are gallstones provoking symptoms, and in the absence of contra-indications, surgery should be unreservedly advised. Cholecystectomy in the non-calculous case, is attended by poor results in a very large percentage of patients,

posed Constitution and By-Laws will be sent to all members of the Executive Committee.

11. *Appropriations for Cancer Committee.*—A letter from Dr. O. A. Brines, Chairman of the Cancer Committee, was read, asking for an increase of appropriation from \$200 to \$275, to pay for printing of cancer publication. The matter was discussed by Dr. H. R. Carstens, Chairman of the Finance Committee. Motion of Drs. Heavenrich-Brunk that the appropriation of the Cancer Committee be increased to \$275 for 1937. Carried unanimously.

12. *County Medical Society Coöperation with Probate Court.*—A letter from Mr. K. B. Read of the Medical Service Bureau of the Wayne County Medical Society, was read, in which it was recommended that the county medical society be a filter committee for all afflicted and crippled children and afflicted adults going to the Probate Court. Motion of Drs. Carstens-Brunk that this matter be referred to the Economics Committee, with the recommendation that it investigate the matter and report to Executive Committee. Carried unanimously.

13. *Externes at Jackson Prison Hospital.*—The Secretary reported on responses from the Deans of the two medical schools of Michigan, to the effect that externes could be supplied during the summer holiday. Dr. Foster was requested to refer this report to Dr. David P. Phillips of the Parole Commission at Jackson Prison.

14. (a) *Publicity for Postgraduate Courses.*—Dr. J. D. Bruce's letter regarding possible publicity to members of the Michigan State Medical Society regarding postgraduate courses was presented. Motion of Drs. Carstens-Brunk that postal cards be sent to all members of the Michigan State Medical Society, containing Dr. Bruce's suggestions, to notify them of the forthcoming postgraduate courses; this expense is to be charged to the postgraduate budget. Carried unanimously.

(b) A letter from Dr. M. R. Kinde of the Kellogg Foundation was read by Dr. Foster, and referred to the Postgraduate Committee.

15. *Upper Peninsula Medical Society Meeting.*—Dr. Cook presented the matter of representatives of the Michigan State Medical Society attending the U. P. Medical Society Meeting next August in Houghton. Motion of Drs. Carstens-Heavenrich that the President, President-Elect, the Chairman of the Council, the Secretary, and the Executive Secretary be authorized to attend this meeting. Carried unanimously.

16. *State Health Department Budget.*—The matter of the Tuberculosis Budget of \$125,000 for the state (excluding Detroit), and the other items in the budget of the Health Department was discussed by the Executive Committee. Motion of Drs. Carstens-Brunk that this matter be referred to the Legislative Committee. Carried unanimously.

17. *Adjournment.*—The meeting was adjourned at 5:40 p. m. The Chair thanked all for their attendance and good advice.

COUNCIL AND COMMITTEE MEETINGS

1. *March 30, 1937*—Legislative Committee—Olds Hotel, Lansing—6:00 P.M.
2. *April 12, 1937*—Legislative Committee—Olds Hotel, Lansing—6:30 P.M.
3. *April 14, 1937*—Joint Meeting of Fee Schedule Committee of M.S.M.S.—M.H.A.—M.A.R. with Finance Committee of State Administrative Board—State Capitol—Lansing—2:00 P.M.
4. *April 22, 1937*—Executive Committee of The Council—Olds Hotel, Lansing—6:00 P.M.

whereas, the same procedure is rewarded with a very satisfactory outcome in the very great majority of stone cases. Dr. Finton emphasized the point that gallbladder surgery is more than an exercise in manual dexterity and, that the surgeon for pre and postoperative care is a vital consideration in diseases of the liver.

A knowledge of the newer discoveries pertaining to the physiology of the biliary tract, pancreas and upper reaches of the alimentary canal is of tremendous value in assessing the patient's complaints and the significance of the gross pathology as viewed through the abdominal section. The speaker stressed the importance of a thorough grounding in the anatomy of this region for the reason that anomalous developments are encountered here much more frequently than in any other part of the body, and occasionally are productive of disastrous developments.

At the conclusion of this more informative discussion Dr. Finton showed three reels of moving pictures taken by him during several expeditions into the Alaskan wilds, often called the scenic paradise of the continent. The reels were beautiful in the extreme, and particularly those that were in color. They amply refuted Dr. Finton's claims to amateurish standing. The doctors in the audience were unusually enthusiastic over the pictures and many questions were asked of Dr. Finton. One of the audience even went so far as to question the speaker concerning the expenses of such a trip. The answer very quickly cooled his yearnings "toward the land of glaciers" and the playground of the world's largest carnivorous animals, the great grizzly and kodiak bears.

At the short business session which followed, Dr. Paine, formerly of Grand Ledge and a former member of the Eaton County Medical Society, was in accordance with his applications unanimously voted back into the fold as he will shortly take up practice in Grand Ledge again.

GENESEE COUNTY

C. W. COLWELL, M.D.
Secretary

The Genesee County Medical Society met at Hurley Hospital on April 7, 1937.

The meeting was called to order by the president, Dr. Alvin Thompson. Minutes of the last meeting were read and approved.

Some communications were read by the secretary and particular attention was urged by the president to one from the State Secretary concerning the Basic Science Bill which is to be taken up by the Legislature within the next few days.

An interesting talk was given by Mr. Elroy S. Guckert on "Health Surveys in Flint." After a considerable amount of discussion, it was moved by Dr. Miner that the Genesee County Medical Society go on record as being whole-heartedly behind this Health program and pledge our support to our now existing committee.

Meeting adjourned.

JACKSON COUNTY

H. W. PORTER, M.D.
Secretary

The regular monthly meeting of the Jackson County Medical Society was held in the Georgian Room of the Hotel Hayes on Tuesday, March 16, preceded by a dinner at 6:30 p. m. The meeting

was called to order by the president, Dr. Crowley, and the minutes of the previous meeting were approved as published in the Bulletin. The name of Dr. R. D. Quillen of Chelsea was presented for membership in this society, action to be taken by the general membership at the next meeting.

The meeting was then turned over to Dr. George Hardie, chairman of the evening, who introduced the speaker, Dr. Harry L. Huber, Associate Professor of Medicine at the University of Chicago. Dr. Huber's hobby happens to be allergy and he chose this as his subject. Some very fine slides were shown of the grasses and weeds that produce allergic symptoms and also of patients suffering from various forms of irritation. The talk was rather long but nobody seemed to mind and one could hardly be expected to give any decent amount of information to an interested audience on such a large subject in a short time. The meeting was opened for questions from the floor, discussions and comments. After these had been taken care of by the speaker the meeting adjourned.

MUSKEGON COUNTY

L. E. HOLLY, M.D.
Secretary

The regular monthly meeting of the Muskegon County Medical Society was held at the Century Club, Friday evening, February 26. Dinner was served at 6:00 p. m. The meeting was called to order by Dr. C. D. Mandeville, president.

The application for membership of Dr. Enid Fillingham, which was approved by the Executive Committee, was submitted for ballot. Dr. Fillingham was unanimously elected to membership in the Muskegon County Medical Society.

The speaker of the evening, Dr. Cubbins, Professor of Surgery at Northwestern University, was introduced by Dr. H. B. Loughery. Dr. Cubbins spoke on "Fractures of the Neck of the Femur."

An excellent movie, in colors, showing the operative technic was demonstrated by Dr. Cubbins. His film shows excellent photographic detail and is of distinct value in demonstrating his method of treatment. A very frank discussion with many questions and answers followed this most instructive and interesting talk.

Forty-eight members attended. The following guests were present: Doctors Yo, Luten and McWilliams, St. Johns; Stryker, Fremont; Moore, Newaygo.

The meeting adjourned at 10:00 p. m.

NORTHERN MICHIGAN

GILBERT B. SALTONSTALL, M.D.
Secretary

The regular monthly meeting of the Northern Michigan Medical Society was called to order by President Christie at the Hotel Perry, Petoskey, Thursday evening, March 11, 1937. Ten members were present.

The program for the evening was arranged by Dr. Frank and was presented by Drs. Engle and Lashmet. The subject was "Pneumothorax Treatment of Pulmonary Tuberculosis." Dr. Engle presented the case history of a patient with active tuberculosis who was treated by Pneumothorax for five years with cure. Dr. Lashmet then demonstrated the x-ray findings on this and other patients through their period of treatment and gave

a very interesting discussion of the benefits and complications of Pneumothorax treatment.

The minutes of the February meeting were read and approved. Correspondence received was read and placed on file. The Society went on record as being in favor of free choice of physicians by Welfare and Relief patients. Each member present agreed to write to Representatives Walsh and Faircloth asking their support of the Basic Science Bill. The subject of reorganization of the Ladies' Auxiliary was brought up as old business and tabled for the present. Dr. Mayne was placed in charge of the program for the April meeting.

SAINT CLAIR COUNTY

GEORGE M. KESL, M.D.
Secretary

A regular meeting of Saint Clair County Medical Society was held at the Concord Club, Mt. Clemens, Michigan, as guests of Macomb County Medical Society, Tuesday, April 6, 1937. Twelve members made the trip to Mt. Clemens and about twenty-five members of Mt. Clemens and Macomb County profession were present. Dr. Henry E. Perry, president; Dr. L. Fernald Foster, secretary; and Wm. J. Burns, executive secretary of the State Society, were present and made short addresses. A splendid dinner was served after which Dr. William S. Reveno of Detroit read a paper on the Medical Treatment of Hyperthyroidism which was well prepared and of value to those present. After the conclusion of Dr. Reveno's address a very scientific and timely paper illustrated by lantern slides was given by the Bacteriologist and Pathologist at St. Joseph's Hospital, Mt. Clemens, on the subject of escaping flatus from the lower intestinal tract. This very interesting and amusing theme brought forth gales of laughter from those present.

* * *

A regular meeting of Saint Clair County Medical Society was held at Harrington Hotel, Port Huron, Michigan, Tuesday, April 20, 1937. President Brush was in the chair. Announcement of a meeting of the Nurses' Alumni Association of Port Huron Hospital at Grace Church House, Wednesday, April 21, 1937, was made by Dr. Brush. Miss Harriet Bard was to present a review of "An American Doctor's Odyssey" at that time. The members of the profession were cordially invited to attend. Dr. Brush reported a conference with Mayor George Harvey of Port Huron with regard to a campaign of vaccination of school children. The subject was discussed and it was decided that children whose parents were able to pay for such service be referred to their own physician and the indigents taken care of in the usual manner without charge. Dr. Waters reported for the Legislative Committee the many trips made to Lansing in behalf of the Basic Science Bill and urged as many who could so arrange to visit Lansing Thursday, April 22, to impress the legislature and encourage favorable action. Doctors A. A. Engelman of Saint Clair and R. H. Holcomb of Marine City were elected to active membership in the Society. Discussion of the activities of irregular healers and counter prescribing druggists were discussed by Doctor Heavenrich and others. Doctor W. D. Barrett of Detroit addressed the Society on the theme, "Some Difficulties Encountered in Gall-Bladder Surgery." Many lantern slides of roentgenologic plates of the upper right abdominal quadrant were shown during the address. Discussion fol-

lowed by Doctors R. M. Burke, J. A. Attridge, A. J. MacKenzie, Reginald Smith and E. C. Sites. Doctor Barrett closed the program in the usual manner. Dr. H. W. Ulch, resident of Harper Hospital, attended as a guest.

WASHTENAW COUNTY

L. J. JOHNSON, M.D.
Secretary

The March meeting of the Washtenaw County Medical Society was held in the Ladies' Dining Room of the Michigan Union on March 9, 1937. Dr. Sidney LaFever, president-elect, was in the chair. Thirty-three members attended. The minutes for January which appeared in the Bulletin in February were approved.

The secretary announced that the venereal disease program for Michigan was under way and that further information would be received from the State Medical Society within a few weeks. Members were urged to watch for this announcement so as to avail themselves of the new methods in treatment of venereal diseases.

Resolutions from the State Society regarding the transferring of the U. S. Public Health Service from the Treasury Department and making it a bureau in a proposed Department of Public Welfare were read. The Society recommended the creation of a Public Health in the national government to include all activities in the field of preventive medicine now performed by the various departments thus eliminating duplications of this service. Also that the direction of such a medical or health department should be in the hands of a competently trained physician, experienced in executive administration.

A letter from President Henry E. Perry asking us to wire Representative Earl C. Michener at Washington, D. C., protesting against a proposed bill which would amend the United States Employee's Compensation Act so every osteopath in the United States would be authorized to treat injured and sick employees in the federal government throughout the United States on a par with fully qualified physicians. Your secretary sent a night letter on March 9 carrying this society's protest, and on March 11, 1937, we received an acknowledgment from Representative Michener.

Attention was called to an article which appeared in *Coronet* (March issue) in which it was stated that milk was the cause of cancer and other serious diseases. A letter has been written to the American Medical Association regarding the author and the article.

Applications for membership were: Dr. Harold Miller of Saline and Dr. Thomas Blair, Jr., of Ann Arbor and Arlee MacKenzie of Ypsilanti State Hospital. They were recommended by the censor committee and unanimously elected to membership.

A program for lay education regarding cancer was presented by Dr. O. A. Brines, pathologist at Receiving Hospital, Detroit. This program is based on lantern slides, booklets and talks by physicians on cancer, which are supplied by the committee on Joint Education. "Cancer is curable if diagnosis is made early"—was the main thread of thought throughout the lecture and pictures submitted by Dr. Brines.

This excellent presentation was discussed by Drs. Cummings, Ransom, Teed, Britton, Echols and Folsom.

The meeting adjourned at 8:35 p. m.

WOMAN'S AUXILIARY

MRS. A. V. WENGER, *President*, 132 Grand Avenue, N. E., Grand Rapids.
 MRS. G. C. HICKS, *President-Elect*, 1009 Wildwood Ave., Jackson.
 MRS. CLAIRE L. STRAITH, *Vice President*, 19305 Berkley Drive, Detroit.
 MRS. FRANK W. HARTMAN, *Press Chairman*, 7440 La Salle Blvd., Detroit.
 MRS. CARL F. SNAPP, *Secretary-Treasurer*, 980 Plymouth Road, S.E., Grand Rapids.

Dear Auxiliary Members:

Your Secretary-Treasurer is very grateful to the county auxiliaries who so promptly sent in their state and national dues. This was required in order that we might pay our National obligations by the



MRS. CARL F. SNAPP

last of March and thus keep the auxiliaries of Michigan in good standing in the National Society; as you must know, each individual member loses her standing in both the state and national organization, if her dues are not paid by the prescribed time.

During the past few years when it was difficult for many of our members to pay the required amount of dues in full, the State Treasury absorbed a portion of the state dues as a temporary relief measure. This procedure, however, depleted our treasury and crippled our activities, especially those connected with the organization of new auxiliaries. In order to again obtain a working capital it became necessary for each member to again pay the full assessment of seventy-five cents to the State and twenty-five cents to the National Treasury in addition to the local dues. To this request the response has been most gratifying from all of the auxiliaries.

Our State President, Mrs. A. V. Wenger, has appointed the nominating committee to select the candidates for president and vice president at the coming election in the fall. This committee consists of: Mrs. J. Earl McIntyre, 600 Grand Ave., Lansing, Mich., Chairman; Mrs. F. T. Andrews, 2325 Crane Ave., Kalamazoo, Mich., Mrs. P. R. Urmston, 1862 McKinley Ave., Bay City, Mich.; Mrs. Frank Gerls, 536 N. Huron St., Pontiac, Mich. If any of the auxiliaries wish to name a candidate for either of these offices, kindly communicate with Mrs. McIntyre or any member of her committee.

Thanking you again for your coöperation, I am

Sincerely yours,
 MRS. CARL F. SNAPP,
Secretary-Treasurer.

COUNTY PRESS CHAIRMEN PLEASE TAKE NOTICE

All Auxiliary material to be exhibited at the National Convention in Atlantic City must be in the hands of the Michigan State Press Chairman not later than May 28.

It is desired that records and examples of the Educational (especially health), social, welfare, and historic activities of each state be displayed to serve as a guide to states that may not be as far advanced in such work.

Because of the tremendous amount of material that will be sent to the convention, plus the fact that the time of visitors will be limited and only the high lights may be seen, an effort will be made to arrange exhibits so that main points and values may be easily assimilated.

Diagrams, posters, or scrapbooks of clippings will be used. Should it be the latter an open index or small chart of their contents will be made to designate pages where individual reports or types of activity may be located.

It is further desired that typewritten lists, in duplicate, of material sent, by whom sent, and to whom and where it is to be returned accompany all exhibits.

(MRS. FRANK W.) BLANCHE B. HARTMAN.

COUNTY AUXILIARIES

Bay County

The regular meeting of the Bay County Auxiliary was held March 10, at the home of Mrs. P. R. Urmston. After the dinner a short business meeting was held. After a report from the nominating committee there was election of officers. All of our last year's officers were reelected for a second year.

Dr. Foster then spoke on "The Basic Science Law," and literature on the subject was passed to all members.

Mrs. E. S. Huckins offered to open her home for our next meeting, which will be held the second week in April.

(MRS. C. S.) ELIZABETH TARTER.

Monroe County

A group of doctors' wives met at the Park Hotel recently to organize an Auxiliary to the Monroe County Medical Society.

Mrs. Albert H. Reisig served as temporary chairman, and Dr. Florence Ames, chairman of the Advisory Committee of the Medical Society, was present to offer counsel. Mrs. R. J. Williams, Mrs. M. A. Hunter, and Mrs. J. A. Humphrey composed the nominating committee. Mrs. W. W. Bond and Mrs. T. A. McDonald drew up the Constitution. Their object will be to assist the members of the Medical Profession in their efforts to abolish the afflictions of mankind and to promote social activities.

The Auxiliary will meet the same evening the Medical Society holds their meeting.

Mesdames C. J. Golinvaux, C. J. Stolpestad, J. J. Siffer, E. C. Loud, W. F. Acker, D. C. Denman, L. C. Blaker, S. V. Dusseau, of Erie, Mich., O. E. Parmelee, of Lambertville, and Wm. Stewart, of Petersburg, were also present. Congratulations are extended to this new group. May success crown their effort.

Saginaw County

Dr. Henry A. Luce was guest of honor at a dinner for forty doctors and their wives at the home of Dr. and Mrs. Arthur E. Leitch preceding the annual public relations meeting of the Saginaw County Medical Auxiliary, which took place in conjunction with the South Intermediate Parent-Teacher Association. Mrs. Robert Jaenichen, general chairman, was assisted by Mrs. William Martzowka, Mrs. A. R. Moon, Mrs. L. A. Campbell, Mrs. L. C. Harvie, Mrs. Frank O. Novy, Mrs. R. M. Kempton and Mrs. J. A. McLandress.

Dr. Luce spoke on mental hygiene. He declared that mental disorders should be recognized as an illness no worse than appendicitis or the itch, which, if given early treatment, could be cured. Dr. Luce said, "Mental disease develops gradually and displays warning signs, contrary to the popular belief that it appears suddenly. The greater number of cases arise from the individual's inability to adjust himself to his environment. There is a general misconception on this subject. While between 10 and 17 per cent of the patients in mental institutions are caused by syphilis, more than 40 per cent are there simply because they were unable to adjust themselves to their environment." Because these mental cases could be cured, it was necessary that the state have facilities to care for them, Dr. Luce said, citing cases to show the harm done by permitting mental patients to remain with their families because of overcrowded hospital conditions in Michigan. Because mental illness does develop gradually and produces warning signs, he advised that people consult their family doctors about mental health.

Mrs. A. R. Moon, member of the auxiliary's public relations committee, introduced Dr. Luce. Mrs. Carl F. Miller, parent-teacher program chairman, had charge of the meeting, and Mrs. Robert G. Leckie sang, accompanied by Miss Elizabeth Walz.

(Mrs. L. C.) DELLA A. HARVIE,
Press Chairman.

Diphtheria Mortality in Large Cities of the United States in 1935: Thirteenth Annual Report on Diphtheria

The thirteenth annual report on diphtheria mortality (*Journal A.M.A.*, June 13, 1936) concerns the ninety-three cities dealt with in the recent article on typhoid. Of the fourteen New England cities, half of their number passed through the year without a single death from diphtheria. The registration of only twenty-eight deaths from diphtheria in 1935 in the whole New England group (population 2,624,805) is remarkable. The eighteen cities of the Middle Atlantic states still rank as the best geographic group in the country as regards diphtheria mortality. Only three cities had a rate higher than 2.0 and eight of the eighteen had no diphtheria deaths. The nine cities of the South Atlantic group did not, on the whole, do as well in 1935 as in 1934, Wilmington, Washington, Miami and Tampa showing an increase in diphtheria mortality. Jacksonville alone in this group shows marked improvement. The cities in the East North Central states had a relatively poor diphtheria year, the divisional group rate rising from 1.89 in 1934 to 2.45 in 1935, an increase which suggests that renewed efforts in some communities should be made to bring about a general inoculation of children. The East South Central cities in 1935 show a marked group improvement over 1934 in diphtheria mortality. This is particularly marked in Louisville, Chattanooga and Nashville. The West North Central division shows some improvement over 1934; this is particularly marked in the case

of St. Louis and Kansas City, Kan. The St. Louis rate appears to be the lowest ever recorded by that municipality. This is true also for Minneapolis and St. Paul, with the relatively low rates of 0.6 and 0.7, respectively. Duluth seems to have been remarkably free from diphtheria for a number of years and is likely to hold its place in the present decade as the leader in the West North Central group; the disease is said to have practically disappeared from that city. The West South Central states remain in almost exactly the same position as in 1934, a slight increase from 5.48 to 5.58 being indicated. The cities in the Mountain and Pacific states experienced higher diphtheria mortality in 1935 than in 1934, the increase in Oakland being particularly striking. The number of cities with diphtheria death rates over 10 decreased from four in 1934 to two in 1935 and those with no diphtheria deaths increased from fifteen to nineteen. The number of diphtheria deaths reported in 1935 was 764 as compared with 821 in 1934 and 3,133 in 1925, ten years ago. The striking feature in the 1935 diphtheria record appears to be that wherever preventive inoculation against diphtheria is practiced consistently diphtheria deaths well-nigh cease to occur, and in some communities diphtheria morbidity is also reduced to an insignificant figure.

RHEUMATISM IN CHILDHOOD: ITS RECOGNITION AND TREATMENT

(Continued from page 302)

often very difficult leaving the physician in genuine doubt as to the existence of the disease when treatment will do the most good. Infections of the upper respiratory tract, particularly the teeth and tonsils if due to streptococcus invasion should be regarded with the utmost concern. Coburn² has stressed the latent period following streptococcus infection of the throat, lasting about two weeks following which signs of heart disease set in. It is well for us to consider this clinical observation seriously. Were it not for the extensive cardiac damage it produces, rheumatism would not be such a menace.

References

1. Coburn, A. F., and Pauli, R. H.: Studies on immune response of rheumatic subject and its relationship to activity of rheumatic process. *Jour. Exp. Med.*, 62:137, 1935.
2. Coburn, A. F.: Relationship of the rheumatic process to the development of alterations in tissues. *Am. Jour. Dis. Child.*, 45:933, 1933.
3. Coombs, C. F.: *Rheumatic Heart Disease*. New York: William Wood, 1924.
4. Jones, T. D., and Bland, E. F.: Clinical significance of chorea as a manifestation of rheumatic fever. *Jour. A. M. A.*, 105:571, (Aug. 24) 1935.
5. Kaiser, A. D.: The prolonged use of acetylsalicylic acid with the addition of magnesium oxide in the treatment of rheumatic infection in children. *Jour. of Ped.*, 8:41, 1936.
6. Keith, J. D., and Clayton, M.: Quoted by Clausen. *Am. Jour. Dis. Child.*, 48:924, 1934.
7. Morse, J. L.: The prognosis of acute endocarditis in childhood. *Am. Jour. Dis. Child.*, 42:735, 1931.
8. Rinehart, J. F., and Mettler, S. R.: The heart valves and muscle in experimental scurvy with superimposed infection. *Am. Jour. Path.*, 10:61, (January) 1934.
9. Sutton, L. P., and Dodge, K. G.: The effect of fever therapy on rheumatic carditis associated with chorea. *Jour. of Ped.*, 6:494, 1935.

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MICHIGAN'S DEPARTMENT OF HEALTH

C. C. SLEMONS, M.D., Dr.P.H., Commissioner
LANSING, MICHIGAN

MAJOR CAUSES OF DEATH IN 1936

Ten major causes of death, the total mortality of which equaled 70 per cent of the 54,777 deaths recorded in Michigan in 1936, have been determined by the Bureau of Records and Statistics.

Heart disease again leads the list by a wide margin with a total of 10,010 deaths, an increase over the 9,603 deaths reported the previous year. Cancer deaths, too, were up over the 1935 total, 5,543 deaths being reported in 1936 and 5,191 in 1935. Deaths by violence moved into third position, 5,246 deaths being attributed to this cause. This total includes 1,009 deaths attributed to heat prostration last summer and 1,913 deaths due to automobile accidents.

Cerebral hemorrhage ranked in fourth place in 1936 with a total of 4,175 deaths, the only major cause of death to show a decrease in comparison with 1935 figures. Pneumonia deaths rose sharply in 1936 to a new high figure of 4,096 deaths in contrast with 3,802 in 1935. Nephritis was in sixth place with a mortality of 3,038.

Angina and coronary disease showed a 22 per cent increase in mortality, 2,888 deaths being reported in 1936 compared with 2,352 in 1935. Even tuberculosis was halted in its downward trend of the past few years, a slight increase of 58 deaths being indicated in the total of 2,102 deaths reported in 1936. Premature birth was in ninth place with a mortality of 1,395, and diabetes completed the list of ten major causes with a total of 1,266 deaths.

MONTHLY INCIDENCE OF COMMUNICABLE DISEASE

Practically all of the common communicable diseases show some increase in incidence so far this year when compared with the same period of last year.

Cases of pneumonia reported have been running about 20 per cent in excess of those for 1936.

For tuberculosis, there has been an increase of nearly 33 per cent. This perhaps is a favorable situation inasmuch as the death rate has not increased, and the increase in cases reported is due to better case finding.

There has been a slight increase in typhoid fever as judged by reports, but this is not significant.

There has been a considerable increase in the incidence of diphtheria which has been heretofore quite low. The increase is mostly accounted for in the southeastern part of the state.

An increase of about 25 per cent has been noted in the number of cases of whooping cough reported.

The scarlet fever incidence has been quite high, in fact, the highest for a number of years, and is more than three times as great as in the early part of 1936.

The increase in measles incidence has been slight and so far is not significant although it is anticipated that there will be a greater number of cases reported this year than during the very low year of 1936.

Smallpox, during the early part of the year, was quite low, but due to a recent outbreak in Dundee the incidence is considerably above that of last year.

The incidence of meningococcic meningitis is slightly in excess of 1936 although it is not alarming.

The number of cases of poliomyelitis reported is very low, and the slight increase this year as compared to 1936 has no significance.

The number of cases of syphilis and gonorrhea reported has increased considerably, but such increase is due in part, no doubt, to the publicity recently given these diseases.

BAY COUNTY HEALTH OFFICER APPOINTED

Dr. R. T. Westman has been appointed as director of the recently organized Bay County Health Department. Dr. Westman received his public health training at Johns Hopkins and comes to Michigan from Minneapolis where he served as epidemiologist with the municipal health department.

Appointment of Dr. Westman completes the organization of the 32 county and district health departments in this state, serving 54 per cent of the rural population and 10.7 per cent of the urban population. Full-time city health departments are also providing health protection services for 70.2 per cent of the urban population; thus, 72.3 per cent of the total population of the state is provided with full-time local health departments.

SURVEY OF OCCUPATIONAL DISEASES

The Bureau of Industrial Hygiene on February 10 sent to 4,943 Michigan physicians a questionnaire regarding all cases of industrial diseases treated since March 1, 1936. Information gained from the questionnaire was to form the basis for a more scientific approach to the prevention of occupational disease hazards in this state. To date, but 382 physicians have contributed the information requested, 7.7 per cent of the total number surveyed.

Of the physicians reporting, 261 stated that they had not treated any such cases. There were 121 physicians who reported treating a total of 254 cases of occupational disease. From these case records the prevalence of these diseases was indicated as follows: Silicosis, thirty-six cases; lead poisoning, thirty-seven cases; poisoning from gases, vapors or fumes, thirty-two cases; dermatitis, ninety-eight cases; and all other causes, fifty-one cases.

Physicians who have not yet returned the questionnaire are urged to do so in order that the fullest possible benefits may be obtained from the survey. Increasing attention being devoted to occupational diseases makes the information gained in such a survey essential to an effective program of prevention.

NUTRITION PROGRAM ORGANIZED

The addition of a staff nutritionist has enabled the Bureau of Child Hygiene and Public Health Nursing to organize an educational program in nutrition as an integrated part of several of its established activities.

The child care classes conducted in the high schools will now receive lectures and demonstrations of infant diets in addition to the regular course of instruction. Two lectures in nutrition are also being added to the series offered in the women's health classes. These lectures include a discussion of the principles upon which adequate diet is based, the selection and preparation of low-cost foods, and the planning of the daily diet for various members of the family group.

Since the hot school lunch is a difficult problem in many of the rural schools, a lecture on this subject is now included in the series offered by the de-

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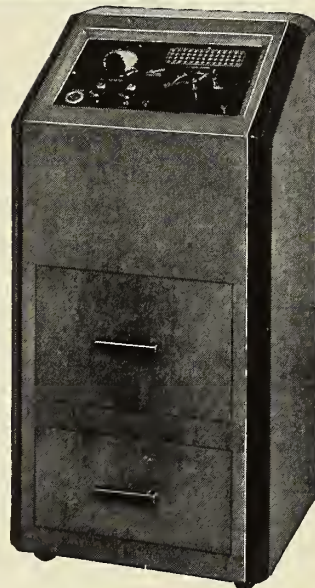
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FRACTURES AND TRAUMATIC SURGERY—Informal Practical Course; Intensive Ten-Day Course starting July 12, 1937.

OTOLARYNGOLOGY—Two Weeks Intensive Course, starting October 4.

OPHTHALMOLOGY—Intensive Two Weeks Course starting October 18, 1937.

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partment to the prospective rural teachers in the county normal schools. The importance of various foods to the school child is emphasized and methods for the application of good nutrition in the rural school program are suggested. The nutritionist is also available for advisory service in home calls with public health nurses.

MICHIGAN SEWAGE WORKS CONFERENCE

The Michigan Sewage Works Association sponsored by the Michigan Department of Health held its thirteenth annual conference at Michigan State College March 29 to April 2, with approximately 100 sewage plant operators from all parts of the state in attendance.

The first half of the conference was devoted to a short course in laboratory instruction conducted by the Bacteriological and Engineering Divisions of the College. The second part of the conference program included papers and round table discussions of chemical and bacteriologic aspects of sewage treatment as well as plant hydraulics and design apropos of Michigan's treatment plants.

NEW RULES AND REGULATIONS FOR THE CONTROL OF COMMUNICABLE DISEASES

The revised rules and regulations for the control of communicable diseases were officially adopted by the State Council of Health at its meeting on March 26, 1937. Printed copies of the revised rules may be obtained upon request to the Michigan Department of Health or local full time health officers.

Botulism, chancre and psittacosis have been added to the list of reportable diseases, and streptococcal (septic) sore throat has been made reportable in epidemics only. The revised tuberculosis regulations include the following: "No person who has an active tuberculosis of the adult type shall be permitted to handle milk or dairy products or other food which is intended for sale."

General regulations for the control of communicable diseases among food handlers have been strengthened by the following: "No person who suffers from diphtheria, scarlet fever, smallpox, poliomyelitis, meningococcal meningitis or streptococcal (septic) sore throat, or who resides in the household with a case of any of these diseases or is a carrier of the organisms causing any of them shall serve or handle in any manner whatsoever food intended for sale."

The following regulations have been added regarding the control of trachoma:

"Cases and suspected cases shall be reported.

"No one with an active case of trachoma shall be permitted to attend school. Such cases shall be excluded from public gatherings. Isolation is optional with the local health officer.

"Contacts of cases shall be kept under observation (not isolation)."

Major changes were made in the rules and regulations for the control and eradication of typhoid fever and typhoid carriers. The new rules and regulations are in line with the present intensive efforts of the department to effectively control the menace of the typhoid carrier. The complete set of new rules and regulations is as follows:

MICHIGAN DEPARTMENT OF HEALTH LANSING

RULES AND REGULATIONS FOR THE CONTROL AND ERADICATION OF TYPHOID FEVER

Definitions

An Incubatory Typhoid Carrier is one who excretes typhoid organisms previous to onset of typhoid fever.

A **Contact Typhoid Carrier** is one who excretes typhoid organisms without having clinically recognizable typhoid fever and whose history indicates that exposure occurred less than one year previous to date of discovery.

A **Convalescent Typhoid Carrier** is one who excretes typhoid organisms during the period from date of becoming afebrile to one year from date of onset.

A **Chronic Typhoid Carrier** is one who continues to excrete typhoid organisms for more than one year after onset of typhoid fever or for more than one year after a non-clinical infection.

A **Professional Food Handler** is one who, wholly or in part, makes his or her living by preparing, dispensing or serving food for public consumption.

Reporting of Cases and Suspected Cases

Cases shall be reported. Suspected cases shall be reported as "suspects" and the department shall be notified of the final diagnosis made.

Exposed Persons

Persons living on premises with a case of typhoid fever shall not engage in any occupation connected with the production for sale of milk or milk products or other foods unless arrangements are made which are satisfactory to the Michigan Department of Health.

Isolation and Release of Cases and Convalescent Carriers

Cases not professional food handlers shall be isolated until afebrile for 48 hours and thereafter until three consecutive fecal specimens obtained from bowel movement not less than 24 hours apart have been found negative in an approved laboratory; or until one satisfactory bile specimen has been found negative in an approved laboratory.

The local health officer shall report the date of the case becoming afebrile to the Michigan Department of Health.

If more than three months have elapsed since the date of onset, a case or convalescent carrier may be released if one satisfactory bile specimen is negative or if consecutive fecal specimens are negative in the ratio of one for each month elapsed since date of onset.

Professional food handlers shall be released as above except that four consecutive negative feces and four consecutive negative urine specimens shall be considered minimal for release.

Hospitalized cases may be released in the same manner as cases and convalescent carriers isolated at home. Hospitalized cases may be discharged to continue isolation at home provided hospital authorities notify the local health officer and the Michigan Department of Health previous to discharge and furnish bacteriologic reports up to time of discharge.

Convalescent Carriers who remain positive two weeks after becoming ambulatory may be conditionally released to live under the restrictions for chronic typhoid carriers provided consent is obtained from the local full-time health officer or from the Michigan Department of Health.

Disposition of Suspected Cases and Suspected Carriers

In addition to those persons reported as typhoid suspects, the Michigan Department of Health shall, in the absence of more definite information, consider as a case or carrier suspect any person from whom a positive *Widal*, blood, feces, urine, bile, saliva, pus, or transudate has been obtained. Disposition of such cases shall be made as follows:

1. Positive *Widal*

A statement shall be obtained from the attending physician or local health officer that the suspect has typhoid fever, may have typhoid fever, or definitely does not have typhoid fever. If the attending physician is unwilling to make a definite diagnosis, it shall be the duty of the full-time local health officer or a representative of the Michigan Department of Health to determine the most probable diagnosis based upon clinical, epidemiologic, and bacteriologic evidence.

2. Positive Blood Culture

A positive blood culture shall be considered *prima facie* evidence that the suspect has typhoid fever.

3. Positive Feces, Urine, or Bile

A positive feces, urine, or bile shall be considered *prima facie* evidence that the suspect is a case or a carrier. In the absence of a case report, the Michigan Commissioner of Health and the local full-time health officer shall require such specimens as will determine the status of the person.

Reporting of Carriers

The local health officer shall report to the Michigan Department of Health any carrier entering or leaving his jurisdiction, as well as any change in residence and post office address occurring within his jurisdiction.

A typhoid carrier admitted to a hospital shall be im-



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diately reported to the Michigan Department of Health by the hospital authorities.

The Michigan Department of Health shall report change in location of a carrier to the local health officer concerned. If the carrier leaves the state, the new location shall be reported to the state health department concerned and to the United States Public Health Service.

Change of Address

A typhoid carrier shall not make a change of residence unless the Michigan Department of Health and the local full-time health officer have been notified of such change at least five days previously. No visit shall be made to another state or county unless the Michigan Department of Health has been notified as to itinerary and destination.

Submission of Specimens

Typhoid carriers and carrier suspects shall submit for examination such specimens as are required by the Michigan Commissioner of Health.

Authenticity and Acceptability of Specimens

The Michigan Commissioner of Health may take such steps as may be necessary to assure himself of the authenticity of specimens.

Bile specimens in which typhoid organisms are not found shall be officially recognized for the release of cases and carriers or for the determination of a focus of infection only if such specimens are (1) amber, clear, viscous, neutral or alkaline, (2) obtained not less than five minutes after stimulation with epsom salts, (3) placed in buffered broth immediately after procurement, and (4) received in the laboratory not more than 48 hours after bile drainage.*

Carrier Release

A chronic typhoid carrier shall be unconditionally released one year following a date fixed by the Michigan Commissioner of Health if twelve consecutive fecal specimens submitted at approximately monthly intervals and two consecutive bile specimens are negative.**

Upon fulfillment of requirements, the former carrier shall receive a statement of his unconditional release from the Michigan Commissioner of Health.

Two months following cholecystectomy a typhoid carrier may be permitted to handle food for public consumption, provided six consecutive fecal specimens obtained at intervals of not less than 24 hours and one bile specimen are negative, and provided that the typhoid carrier continues to submit specimens to obtain final release.

Occupational Restrictions

Typhoid carriers shall not handle for public consumption milk, cream, cheese, ice cream and other dairy products, or fruits and vegetables unless such fruits and vegetables are commonly cooked before being eaten.

No typhoid carrier shall reside on premises where milk or milk products are being handled for public consumption unless such milk or milk products are delivered to a condensary or evaporating plant under circumstances satisfactory to the condensary or evaporating plant and to the Michigan Department of Health.

No typhoid carrier shall work in any capacity in a restaurant or other establishment in which food is sold unless in the opinion of the local full-time health officer and the Michigan Commissioner of Health the possibility of infecting others is remote.

Excreta Disposal

The excreta of a typhoid carrier shall be disposed of in a manner satisfactory to the Michigan Department of Health.

Care of Clothing

No typhoid carrier shall send personal clothing or bed linen to a public laundry unless such is first disinfected in a manner satisfactory to the Michigan Department of Health.

Coöperation Between Carrier and Local and State Health Officials

The premises of any typhoid carrier, or of any person suspected of being a typhoid carrier, may be placarded if such person refuses to comply with the rules and regulations of the Michigan Department of Health.

*The laboratory will examine, however, any specimens submitted as bile.

**A typhoid carrier may submit specimens at any time for the purpose of obtaining unconditional release.

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◆ General News and Announcements ◆

The One Hundred Per Cent Club of the Michigan State Medical Society:

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2. Branch County Medical Society.
3. Cass County Medical Society.
4. Clinton County Medical Society.
5. Eaton County Medical Society.
6. Gogebic County Medical Society.
7. Ingham County Medical Society.
8. Lapeer County Medical Society.
9. Lenawee County Medical Society.
10. Livingston County Medical Society.
11. Luce County Medical Society.
12. Manistee County Medical Society.
13. Menominee County Medical Society.
14. Muskegon County Medical Society.
15. Newaygo County Medical Society.
16. Northern Michigan Medical Society.
17. Oceana County Medical Society.
18. Ontonagon County Medical Society.
19. Schoolcraft County Medical Society.
20. Tuscola County Medical Society.

The above County Medical Societies have paid dues in full for each and every member of the County and State Medical Society. A number of other County Societies lack but a few, sometimes only one or two, of being One Hundred Per Cent. Have YOU paid your dues?

Dr. George L. Waldbott of Detroit spoke to the Bay County Medical Society on "Allergy" on March 24.

"The Evils of Socialized Medicine" was the subject of a talk given by Dr. L. Fernald Foster before the Saginaw Exchange Club on April 6.

* * *

Dr. Walter L. Finton, of Jackson, spoke before the Eaton County Medical Society, March 25, 1937, on "Treatment of Gall-Bladder Disease."

* * *

The State of Pennsylvania has six physicians in the Senate and eight in its House of Representatives.

* * *

Dr. Walter L. Finton of Jackson gave a talk on "The Treatment of Gall Bladder Disease" before the Eaton County Medical Society on March 25.

* * *

Intra-Abdominal Adhesions, an Experimental and Clinical Study, is the title of a paper by Dr. Leon M. Bogart, which appeared in the January number of the *Archives of Surgery*.

* * *

The annual banquet of the Phi Beta Pi Medical Fraternity was held this year in the Spanish Grill of the Fort Shelby Hotel, Detroit, Saturday evening, April 24, 1937.

* * *

Dr. Norman R. Kretzschmar of the University Hospital, Ann Arbor, addressed the Muskegon County Medical Society, April 16, on the subject "Clinical Aspects of Endocrinology."

* * *

Dr. Thomas Parran, Jr., Surgeon General of the United States Public Health Service, will ad-

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The Annual Dinner

dress members of the Michigan State Medical Society in Grand Rapids at the Annual Meeting, on Wednesday, September 29, 1937.

* * *

Wanted: Young physician who desires a partnership practice in a city of approximately 30,000 population; single man, who can do tonsillectomies preferred. For further information write the Executive Office, 2020 Olds Tower, Lansing.

* * *

Dr. Loren Shaffer of Detroit, chairman of the Advisory Committee on Syphilis Control of the Michigan State Medical Society, spoke on "The Program for Control of Venereal Diseases in the State of Michigan" at the meeting of the Bay County Medical Society on April 14.

* * *

Mead Johnson & Company is extended our sincere thanks for relinquishing the front page of this issue of *THE JOURNAL* so that we might make a special cover for The Directory Number. Mead Johnson's advertisement will be found this month on the inside back cover.

* * *

Some of the **County Medical Societies** of Michigan publish on their stationery the names of all their members. Typical of this is the Dickinson-Iron County Medical Society. Dr. D. R. Smith and Dr. W. H. Huron of Iron Mountain are president and secretary, respectively.

* * *

The **Northern Tri-State Medical Association** held its annual meeting in Jackson, Michigan, at the Hayes Hotel, on April 13. Many speakers of national prominence were on the program. Dr. W. H. Marshall of Flint is president and Dr. Robert H. Elrod of Toledo, Ohio, is secretary.

The **Local Committee on Arrangements** for the 1937 Annual Convention of the Michigan State Medical Society to be held in Grand Rapids is composed of Dr. Vernor M. Moore, Chairman, Dr. M. S. Ballard, Dr. Leon De Vel, Dr. Wm. R. Torgerson, and Dr. A. V. Wenger, all of Grand Rapids.

* * *

Dr. Maxwell J. Lick, president of the Pennsylvania State Medical Association, will be one of the principal speakers at the annual convention of the Michigan State Medical Society in Grand Rapids on September 28, 1937. Dr. Lick is one of the outstanding orators of the country.

* * *

Dr. Thomas B. Cooley, Professor of Pediatrics, Medical Department of Wayne University and Chief of Staff of the Children's Hospital of Michigan, has been named executive secretary of the Council for Pediatric Research of the American Academy of Pediatrics.

* * *

The **American Association for the Study of Goiter** will hold its 1937 annual meeting on June 14, 15, 16, in Detroit at the Book-Cadillac Hotel. The program lists many physicians of national prominence. Physicians interested are invited and welcome. For further information write Dr. W. Blair Mosser, Kane, Pennsylvania.

* * *

Dr. S. L. LaFever of Ann Arbor suggests that all County Medical Societies should choose a President-Elect each year, thereby giving two years' experience and a better working knowledge of policies to the presiding officer. The President-Elect automatically takes office as President the year following his election.

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Dr. Don Marshall, Assistant Professor of Ophthalmology, University of Michigan, has been appointed director of the Department of Ophthalmology of the George F. Geisinger Memorial Hospital, Danville, Pennsylvania. The trustees of the hospital announced that the hospital is ready to receive patients as of April 26.

* * *

Dr. Nathan J. Frenn of Bark River, secretary-treasurer of the Delta County Medical Society, is successful in bringing out 100 per cent attendance at the monthly meetings of the medical society by sending a personal letter to each member, explaining the background of the subject to be presented, and pertinent notes about the lecturer. Congratulations!

* * *

The American Board of Ophthalmology will conduct examinations in Philadelphia, June 7, 1937, and in Chicago, October 9, 1937. All applications and case reports, in duplicate, must be filed at least *sixty days* before the date of the examination. For further information write Dr. John Green, Secretary, 3720 Washington Blvd., St. Louis, Missouri.

* * *

Play Golf with A.M.A. Fellows on Monday, June 7. Beautiful Seaview Country Club, Atlantic City, N. J., will attract 200 members of the American Medical Golfing Association who will compete in 36 or 18 hole competition for approximately 100 trophies and prizes.

For application blank and full particulars write Bill Burns, 731 N. Capitol Ave., Lansing, Mich.

* * *

At the Annual Meeting of the American Medical Association in Atlantic City, June 7 to 11,

1937, Dean J. H. J. Upham of Ohio State University will become the new President of the A.M.A. Dr. W. H. Martin, 12207 Woodward Avenue, Detroit, President of the Medical Alumni of Ohio State University, requests that all alumni of Ohio attend this Convention. Those wishing to go by automobile may leave Detroit June 5 with Dr. Martin's group.

* * *

Macomb and St. Clair County Medical Societies held a joint meeting on Tuesday, April 6, at the Concord Club, Mt. Clemens. Dr. Wm. S. Reveno of Detroit gave a scientific paper on "Hyperthyroidism." Others present at this joint meeting were President Henry E. Perry of Newberry, Secretary L. Fernald Foster of Bay City, and Executive Secretary Wm. J. Burns of the State Society.

* * *

Dr. F. P. Husted of Bay City gave a paper entitled "Delayed Operative Treatment of Ruptured Appendicitis" at the Mecosta-Osceola County Medical Society meeting of Tuesday, April 13, which was held in Big Rapids. "Allergy" was the subject of a paper presented by Dr. Wm. G. Gamble, Jr., Pathologist at Mercy Hospital, Bay City, at the same meeting. Dr. L. Fernald Foster, Secretary of the Michigan State Medical Society, spoke on "State Society Activity."

* * *

The Michigan Conference on Education and Mental Health met under the auspices of The Michigan Society for Mental Hygiene and The National Committee for Mental Hygiene at the Hotel Statler, Detroit, on April 16, 17, 1937. Dr. Grover C. Penberthy of Detroit acted as Chairman of the Committee on Arrangements. Among others who served on this committee were Dr.

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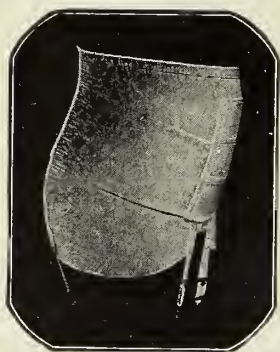
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* * *

The District Department of Health No. 6 comprising Luce, Mackinac, Schoolcraft Counties in the Upper Peninsula celebrated its Second Anniversary March 19, 1937, at Newberry, Michigan, with a very successful Public Health Meeting. Dr. Henry E. Perry of Newberry, president of the Michigan State Medical Society, was chairman of the meeting. About 300 persons interested in health came from all parts of the Upper Peninsula. Close relationship in health matters with the family physician was emphasized particularly. Dr. C. D. Hart is the District Health Officer.

* * *

Crippled and Afflicted Child commitments for March, 1937:

Crippled Child: Total of 206. Of the total number 96 went to the University Hospital and 110 went to miscellaneous hospitals. From Wayne County (included in above totals): Total cases, 56. Of the 56 cases in Wayne County, 7 went to University Hospital, and 49 to local hospitals.

Afflicted Child: Total of 1,428. Of the total number 293 went to University Hospital and 1,135 went to miscellaneous hospitals. From Wayne County (included in above totals): Total cases 324. Of the 324 cases in Wayne County, 24 went to University Hospital, and 300 went to miscellaneous hospitals.

* * *

Summer Diarrhea in Babies. Casec (calcium caseinate), which is almost wholly a combination of protein and calcium, offers a quickly effective method of treating all types of diarrhea, both in bottle-fed and breast-fed infants. For the former, the carbohydrate is temporarily omitted from the twenty-four-hour formula and replaced with eight level tablespoonfuls of Casec. Within a day or two the diarrhea will usually be arrested, and carbohydrate in the form of dextri-maltose may safely be added to the formula and the casec gradually eliminated. Three to six teaspoonfuls of a thin paste of casec and water, given before each nursing, is well indicated for loose stools—in breast-fed babies. Samples may be obtained from Mead Johnson & Company, Evansville, Indiana.

* * *

The first medical supplement in Michigan newspapers will appear in the *Detroit Free Press* sometime in May. The supplement will be published under the auspices of the Wayne County Medical Society who will furnish appropriate material concerning the organization of the County Medical Society and stories about medical projects, medical men and other articles which will acquaint the public with its friend—the Family Doctor.

This is a project which can be worked out in practically every county in the state and is well worth while. You can build up the goodwill of the public—your patients—through this medium. Contact the editor of your local newspaper and urge him to cooperate with the county medical society by publishing a supplement. He will welcome the opportunity.

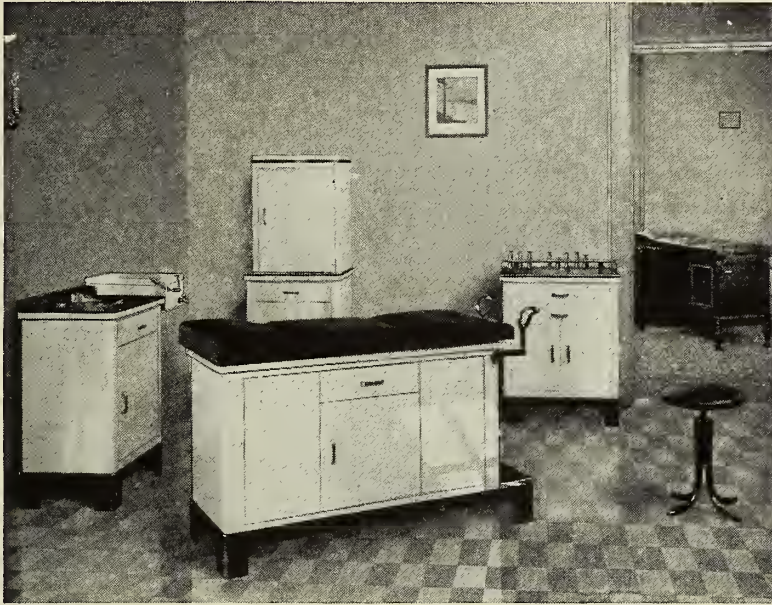
* * *

Grand Rapids has two new hospital superintendents. Both arrived to assume their duties on March 30. Dr. Norbert A. Wilhelm comes from Boston to assume the management of Butterworth Hospital. He was assistant medical director of a large sugar plantation in Puerto Rico, following which position he obtained a fellowship of one and

(Continued on Page 338)

ANNOUNCING . . .

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a half years in neuropsychiatry at the Henry Ford Hospital. He was later assistant superintendent of the Peter Bent Brigham Hospital, Boston.

Dr. John E. Gorrell comes from Pittsburgh to take over the medical directorship of the Blodgett Memorial Hospital. Dr. Gorrell is a native of Chicago where he received his education. He was assistant superintendent of the Chicago Clinics following which he was superintendent of the Falk Clinic of the University of Pittsburgh.

Both Dr. Wilhelm and Dr. Gorrell are young men in the middle thirties.

* * *

A Woman's Auxiliary to the Monroe County Medical Society was organized on March 18. Mrs. Albert H. Reisig acted as temporary chairman and Dr. Florence Ames, Chairman of the Advisory Committee of the Woman's Auxiliary of the Michigan State Medical Society, was present to offer assistance. Mrs. Robert J. Williams, Mrs. M. A. Hunter, and Mrs. J. A. Humphrey were chosen as a nominating committee. Mrs. W. W. Bond and Mrs. T. A. McDonald will compose the committee on the constitution. The Auxiliary will meet once a month on the same evening that the medical society meets. Their object is to assist members of the medical profession in their efforts to abolish the afflictions of mankind and to promote social activities.

Those present at the organization meeting were Dr. Ames, Mrs. Humphrey, Mrs. Hunter, Mrs. Bond, Mrs. McDonald, Mrs. Williams, Mrs. Reisig, Mrs. C. J. Golinvaux, Mrs. C. T. Stolpestad, Mrs. J. J. Siffer, Mrs. E. C. Long, Mrs. W. F. Acker, Mrs. D. C. Denman, Mrs. L. C. Blakey, Mrs. S. V. Dusseau of Erie, Mrs. O. E. Parmelee of Lamberville, and Mrs. William Stewart of Petersburg.

* * *

Michigan Association of Roentgenologists

The regular quarterly meeting of the Michigan Association of Roentgenologists was held at the Statler Hotel, Detroit, on April 21. Following the business meeting at 5 P. M., there was a subscription dinner after which the evening was devoted to a scientific program as follows:

"Incidence of Thymic Hypertrophy and the Use of Iodized Salt"—Drs. Donaldson and Towsley.

"Bone Syphilis"—Dr. D. M. Stewart, Toledo, Ohio.

"Roentgenographic Visualization of Pulmonary Arterial Circulation in Autopsy Material"—Dr. C. C. Birkelo.

Among those present were: Drs. A. R. Bloom, John B. Jackson, Rollin H. Stevens, R. W. Cooley, D. W. Patterson, S. W. Donaldson, A. W. Chase, A. K. Payne, J. H. Dempster, A. L. Ziliak, G. C. Chene, L. Reynolds, Ruth Bigelow, J. C. Kugler, V. M. Moore, E. R. Witwer, T. Leucutia, H. W. Porter, L. E. Holly, H. A. Jarre, L. F. Wilcox, Howard P. Doub, J. E. Lofstrom, M. W. Clift, Henry L. Ulbrich, Wm. S. Wallace, Gerald J. Bernath, Clyde Hasley, J. C. Kenning, C. S. Davenport, Carl Pierce, Bruce MacDuff, C. E. Weaver, and C. C. Birkelo.

* * *

Crippled-Afflicted Child: At a meeting held April 14, 1937, in the State Auditor General's Office, to discuss Fee Schedules A, B, C, D, the Filter Committee, and the appropriations for the Crippled-Afflicted Child, the following were present:

1. Members of the Finance Committee of the State Administrative Board: Auditor General George T. Gundry; Attorney General Raymond W. Starr; and Treasurer Theo. I. Fry.

2. The Crippled Children Commission: Messrs.

(Continued on Page 340)



IF YOU GAVE

Each Patient

HALF A DAY

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WHEN a patient is sensitive to such common foods as wheat, milk or eggs, the task of explaining the necessary diet is a tedious one. And all the "musts" and "don'ts" at once are apt to be confusing.

Why not take a simpler way that's really better for your patient and for you? Just hand him a copy of this booklet—marking the section which applies to his particular sensitivity. There, plainly stated for easy and repeated reference, are exactly the foods he may or may not have—and even suggestions for safe and tempting recipes to enhance restricted menus.

You can distribute this booklet with perfect confidence. It is approved and used by many leading allergists, in private practice and allergy clinics. With the direction and assistance of recog-

nized authorities, it was prepared in our laboratories, where years have been devoted to research and the study of allergy problems. These booklets are for professional use only. None are distributed to the laity.

Notice, when you examine this booklet, how frequently Ry-Krisp appears in the lists of accepted foods. That's because these tempting and delicious wafers are simply made of flaked whole rye, salt and water, double baked. They're perfectly safe—so inviting that they actually encourage closer adherence to the diet. For free samples and copies of the Allergy Diet booklet, use the coupon.

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Hugh E. Van de Walker, Jos. Schnitzler, Dr. H. B. Fenech and Mrs. L. James Bulkley.

3. Judge Frank L. McAvinchey of Flint, representing the Probate Judges' Association.

4. Dr. W. L. Quennell of Highland Park, representing the Michigan Hospital Association.

5. Dr. E. R. Witwer, Harper Hospital, Detroit, representing the Michigan Association of Roentgenologists.

6. The following represented the Michigan State Medical Society: Drs. H. E. Perry, Henry Cook, F. H. Purcell, P. R. Urmston, G. C. Penberthy, and H. S. Collisi, and Executive Secretary Wm. J. Burns. Also present were Mr. H. H. Howett, Secretary of the Crippled Children Commission; Budget Director Geo. Thompson and Mr. Marsman of the Auditor General's Office.

* * *

Northern Tri-State Medical Society

The following are the officers for the ensuing year of the Northern Tri-State Medical Society: President—Dr. G. E. Jones, Lima, Ohio; vice president—Dr. J. N. Kelly, LaPorte, Ind.; secretary—Dr. Robert H. Elrod, Toledo, Ohio; treasurer—Dr. D. R. Brasie, Flint, Michigan.

Counselors—Dr. W. H. Marshall, Flint, Michigan; Dr. H. E. Randall, Flint, Michigan; Dr. B. Hibbard, Lima, Ohio; Dr. O. P. Klotz, Findlay, Ohio; Dr. L. T. Rawles, Ft. Wayne, Indiana; Dr. G. O. Larson, LaPorte, Indiana.

The 1938 meeting will be held in Findlay, Ohio.

The Advertisers' Messages in The Directory Number deserve your especial attention, Doctor.

The list of advertisers on page 358 includes a number of new friends as well as the names of firms which for years have been coöperating with the Michigan medical profession.

Remember, all products advertised in THE JOURNAL of the M.S.M.S. are Council-approved.

Post Graduate Courses

The summer session of the Medical School of the University of Michigan will begin Monday, June 28, 1937, and close August 20. The following academic courses are available to physicians: anatomy, bacteriology, biological chemistry, and physiology. Among the clinical courses listed are dermatology and syphilology, internal medicine, neurology, obstetrics and gynecology, pathology, pharmacology—Materia Medica-therapeutics, and surgery, including surgical anesthesia. It will be seen that in addition to the usual clinical instruction, an opportunity will be afforded for refresher courses in non-clinical or academic branches. To quote from the announcement of the Department of Post Graduate Medicine:

"The privilege of electing two or more of the above described courses as a composite course is attracting many practitioners to attend the summer school session and proving to be a very satisfactory method for continued study in medicine. A full or any part of a day's schedule may be elected according to individual needs. Arrangements for these courses may be made with the Director of the Department of Postgraduate Medicine by mail or through personal interview."

American Medicine

The following Michigan physicians contributed letters, extracts from which comprised the two-volume work, *American Medicine, Expert Testimony out of Court*, by the American Foundation:

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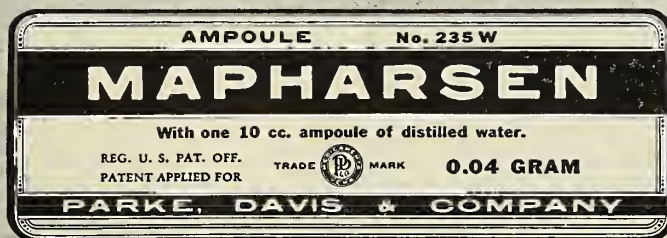
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IN MEMORIAM

Dr. Albert B. Walker

Dr. Albert B. Walker of Wyandotte, Michigan, died at his home, March 11th. He was born in Ontario sixty-four years ago, but has lived in Michigan since 1895. Dr. Walker was a graduate of the Detroit College of Medicine. He was a member of the Wayne County and Michigan State Medical Societies. He is survived by his wife and two brothers, Ernest W. Walker of Toronto, and Fred L. of Cleveland; three sisters, Miss Lillian Walker of Toronto, Mrs. W. C. Embury of Warsaw, N. Y., and Mrs. Mabel Oliver of Vancouver, B.C.

* * *

Dr. Clarence H. Westgate

Dr. Clarence H. Westgate died in his home in Morenci, February 27, 1937, of cardiac disease. He was born in Williamstown, Michigan, September 28, 1880, and in 1887 moved with his parents to Detroit, where he attended the public schools and graduated from the Detroit College of Medicine in 1902.

He started practice in Adrian, but in 1903 went to Pittsburgh, Pa., where he accepted an appointment as surgeon with the Westinghouse Corporation. In 1908, he moved to Weston, Michigan, where he took up private practice until he moved to Morenci in 1925.

Dr. Westgate, always a student, contributed much to his local community as well as to the Lenawee County profession. He was devoted to his county medical society which he served as secretary for several years. At the time of his death, he was chief of staff of the Detwiler Hospital at Wauseon, Ohio, and physician in charge of the Lenawee County Tuberculosis Sanitarium. He was also an associate member of the medical staff of the Emma L. Bixby Hospital at Adrian.

Reading with Emphasis

(The Journal-Lancet)

Some people mark up the books they read, often underlining sentences and bracketing entire paragraphs. Destructive vandalism we say with one accord. But wait a minute; whose books are we talking about? If they belong to a library or some other person, that's one thing, and we still agree; but if they belong to the reader, that's quite another matter. Is there any better way of expressing approval or disapproval of the written word than by making just such notations of acceptance or rejection at the very time; and what else in heaven's name are book margins for?

We know an Osler of early vintage with pencilings all over the landscape depicting additional observations made by the great teacher on his hospital rounds the very day they were jotted down. Don't try to tell the owner of that book that it is disfigured. Not only does it have the added information but a wealth of inspirational value. It brings back the circumstances of the case, the very ward in which the patient lay, the charm of the master as he patted a shoulder here and took the arm of another there in conducting his group of students from one bed to another. That book is illuminated with precious memories. It is wear and all these little indications of use that testify to a book's worth and often enhance its value.

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Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

PHYSICAL THERAPEUTIC METHODS IN OTOLARYNGOLOGY. By Abraham R. Hollender, M.D., F.A.C.S. Associate in Laryngology, Rhinology, and Otolaryngology, University of Illinois College of Medicine; Fellow of the American Academy of Ophthalmology and Otolaryngology. With 189 illustrations. St. Louis: The C. V. Mosby Company, 1937.

This work is a compilation of chapters written by the author and ten others who are interested in some phase of treatment of otolaryngologic disease by physical methods. While the above is true, one is impressed by the absence of exaggerated claims for physical therapy. The first part of the book is devoted largely to a discussion of the physics of the various modalities used in physical therapy. In part two, the application of these, and other physical methods, such as ionization, to the treatment of otolaryngologic disease is discussed. A short chapter is given to the discussion of tests involving the production of ocular nystagmus. Another to the use of hearing aids. The final chapters are devoted to the treatment of neoplastic diseases in this field, which includes a chapter by Chevalier L. Jackson on the use of the endoscope.

THE DISEASES OF INFANTS AND CHILDREN. By J. P. Crozer Griffith, M.D., Ph.D., Emeritus Professor of Pediatrics in the University of Pennsylvania; Consulting Physician to the Children's Hospital, Philadelphia; Consulting Physician to St. Christopher's Hospital for Children; Consulting Pediatricist to the Woman's, the Jewish, and the Misericordia Hospitals, etc.; Corresponding Member of the Société de Pédiatrie de Paris; and A. Graeme Mitchell, M.D., B. K. Rachford Professor of Pediatrics, College of Medicine, University of Cincinnati; Medical Director and Chief of Staff of the Children's Hospital of Cincinnati; Director of the Children's Hospital Research Foundation; Director of Pediatric and Contagious Services in the Cincinnati General Hospital. Second Edition, Revised and Reset. 1153 pages with 293 illustrations. Philadelphia and London: W. B. Saunders Company, 1937. Cloth, \$10.00 net.

Early chapters of the book are devoted to the childhood organism as a whole where attention is called to the many points of difference between it and the adult organism. Attention is given to the general question of breast feeding, weaning, and the employment of a wet nurse, together with a discussion of human milk and methods by which it may be altered. The question of substitute feeding is given ample consideration and the various foods other than milk that should be properly included in the diet of the infant or young child are discussed, giving their food value and methods of preparation. Various proprietary and patented foods are given consideration, so that the practitioner may know their value and the advisability of their use. The author calls attention to the various peculiarities of disease as found in children. He gives methods of examination that are found to be of advantage with these patients and a general discussion of symptomatology and of diagnosis as found useful by the pediatricist. A chapter is devoted to treatment and various procedures are outlined that have often been too sparsely covered in a book on disease of children.

The author gives a chapter to the diseases peculiar to the new born child. There is a section on the infectious diseases and another on diseases that are general, nutritional, or metabolic. Finally, the authors take up and discuss the various system diseases where the reader will find a full discussion

of these diseases. Throughout the book there are many illustrations, radiographs, and charts, many of which are in color. At the end of each chapter there is a voluminous bibliography of references to the literature.

Altogether this work appears to cover the field of pediatrics in a very complete manner and it should be a valuable addition to the library of any physician interested in diseases of children.

MEDICAL GREEK AND LATIN AT A GLANCE. By Walter R. Agard, B. Litt. (Oxon.), Professor of Greek, University of Wisconsin; with an introduction by C. H. Bunting, M.D., Professor of Pathology, University of Wisconsin. Second edition revised. Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, New York, 1937. Price \$1.50.

This is a very necessary work. It should be mastered thoroughly by the medical student, if not the premedical student. We find it valuable after a lapse of over thirty years since our freshman days. The book consists of word lists conveniently grouped, showing how both Latin and Greek words and roots enter into the formation of medical words. There is no dictionary subject to so much expansion as the various revisions of medical dictionaries. Most of the new words are formed from Latin and Greek, hence the importance of an acquaintance with this book which gives much in a comparatively small space. We would have preferred it had regular ten or twelve point type been used instead of typewriter type. However, this is a minor criticism.

THE PHYSIOLOGICAL BASIS OF MEDICAL PRACTICE. A University of Toronto text in applied physiology. By Charles Herbert Best, M.S., M.D., D.Sc. (Lond.), F.R.S. (Canada), F.R.C.P. (Canada), Professor and Head of the Department of Physiology, Associate Director of the Connaught Laboratories, Research Associate in the Banting-Best Department of Medical Research, University of Toronto; and Norman Burke Taylor, M.D., F.R.S. (Canada), F.R.C.S. (Edin.), F.R.C.P. (Canada), M.R.C.S. (Eng.), L.R.C.P. (Lond.), Professor of Physiology, University of Toronto. 1,684 pages. Price, \$10. Baltimore: William Wood & Company, 1937.

There is much need for a work on the above subject. Textbooks on physiology as a science are numerous and of first class quality. Works on physiology, the purpose of which is to correlate science with the active practice of medicine are not so numerous. In many instances, the internist is called to diagnose conditions in which there is perversion of function with perhaps no marked organic changes. As the authors have said, the present work is to serve as a link between the laboratory and the clinic and as a textbook, to facilitate the teaching of physiology throughout the pre-clinic and clinical years of the undergraduate course in medicine. Too much cannot be said in favor of rationalizing the practice of clinical medicine. So intimately connected is function to structure of the organ that the authors have prefaced each chapter with an account of the morphology of the organs concerned. The book will be found invaluable to the internist in particular, and to the surgeon who looks upon his specialty as something more than skillful technic.

The Hebrew Physician (Harofe Haivri) published by the Harofe Haivri Publishing Committee under the able editorship of Dr. Moses Einhorn, of New York, appeared in a new and highly augmented garb with 256 pages of reading matter after a silence of two years. It is published semi-annually. Typographically it is a masterpiece, aside from its intrinsic merit from a medical and literary standpoint. To the outside world which does not master the Hebrew, brief abstracts are appended in the English language. It is interesting to note the terminology which is derived from two sources:

(Continued on Page 346)

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(1) Biblical and Talmudic and (2) modern transliteration from Latin and accepted standards.

Among the leading articles of this issue may be mentioned "New Ways in Treating Malaria" by Hillel Joffe, M.D., of Jerusalem; "New Methods of Treatment of Trichomonas Vaginitis" by L. Rosenthal, M.D.; "Clinical Contributions to the Question of Frontal Epilepsy" by L. Halpern, M.D.; "Obstetric Brachial Paralysis (Erb's Palsy)" by S. W. Boorstein, M.D.; "Sedimentation Rate and Composition of Blood Albuminates in Colitis" by M. Rachmilevitz, M.D.; "Acromegaly and Its Treatment by Roentgen Radiation" by A. Dubnove of Detroit, and many other articles of scientific import that space does not permit to enumerate in detail. The illustrations are well done and the bibliography is thoroughly scanned and properly annotated. *The Hebrew Physician* is a distinct and valuable contribution in the Hebrew language to Medical Science.

What the Country Needs

What this country needs isn't any more liberty but less people who take liberties with our liberty.

What this country needs isn't a job for every man but a real man for every job.

What this country needs isn't to get more taxes from the people but for the people to get more from the taxes.

What this country needs is not more miles of territory but more miles to the gallon.

What this country needs is more tractors and less detractors.

What this country needs is not more young men making speed but more young men planting spuds.

What this country needs is more paint in the old place and less on the young face.

What this country needs isn't a lower rate of interest on money but a higher interest in work.

What this country needs is to follow the footsteps of the fathers instead of the footsteps of the dancing master.

Among Our Contributors

Dr. Leon M. Bogart is a graduate of the Chicago School of Medicine and Surgery, 1913. He pursued postgraduate work in Vienna, 1923, 1928, also postgraduate courses at St. Bartholomew's Hospital, London, 1929. He is a member of the American Association for the study of Goiter, and attending surgeon, Hurley Hospital, St. Joseph's Hospital and Women's Hospital, Flint, Michigan. His practice is limited to consultation and general surgery.

* * *

Dr. Moses Cooperstock is Medical Director of the Northern Michigan Children's Clinic of the Children's Fund of Michigan, Marquette, Michigan. He is Assistant Professor of Pediatrics, University of Michigan Hospital, Ann Arbor, Michigan.

* * *

Dr. Harold B. Rothbart is a graduate of the University of Toronto, M.D., 1930. He was interne and resident, respectively, University Hospital, Ann Arbor; Resident, Cook County Children's Hospital, Chicago, 1933-34; Instructor in Pediatrics and Infectious Diseases, University of Michigan, 1934-36. He is now Instructor in Pediatrics, Wayne University, and Attending Pediatricist, Children's Hospital, Detroit, and is a diplomate, American Board of Pediatrics.

* * *

Dr. William A. Scott received his A.B. degree from Kalamazoo College in 1926 and his M.D. at the University of Michigan Medical School, 1930. He was psychiatric interne two years under Dr. G. F. Inch, the first year at the Traverse City State Hospital and the second year at the Ypsilanti State Hospital. Since then he has been Senior Assistant Physician Ypsilanti State Hospital. His specialty is psychiatry.

Dr. Lowell S. Selling is the Director of the Recorder's Court, Psychopathic Clinic, and Assistant Attending Neuropsychiatrist at Eloise Hospital, and also Adjunct Neuropsychiatrist at Harper Hospital. He is a graduate of Bellevue Hospital Medical College, and Ph.D. in Psychology from Columbia University. He is the author of a book "Diagnostic Criminology," and several other publications.

Mr. Alan Canty is Traffic Psychotechnologist of the Recorder's Court, Psychopathic Clinic. He was a graduate student in psychology of Western Reserve University, and at the same time was Psychological Examiner for the Cleveland Street Railway Company, investigating the capacities of motormen and bus-drivers. Since 1930 he has been on the staff at the Psychopathic Clinic. He has written several papers on the examination of drivers.

* * *

Dr. Loren W. Shaffer is a graduate of the University of Michigan Medical School, 1917, and is on the staff of Receiving and Harper Hospitals in Dermatology.

* * *

Dr. Fred Wise is Professor of Clinical Dermatology and Syphilology, New York Post Graduate Medical School and Hospital; Chief of Clinic, Skin and Cancer Unit, New York Post Graduate Medical School and Hospital; Director, Department of Dermatology, French Hospital, New York City; Senior Attending Dermatologist, French Hospital and Montefiore Hospital; Consulting Dermatologist, St. Joseph Hospital, Far Rockaway and Beth-El Hospital, Brooklyn, New York; Editor of The Year Book of Dermatology and Syphilology, and Past Co-Editor of The Archives of Dermatology and Syphilology.

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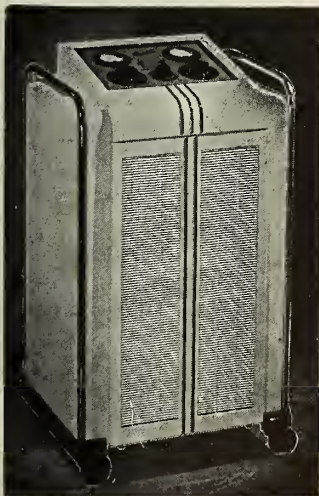
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The Federal Government transferred its gold to Fort Knox, Kentucky, with a fanfare of secrecy.—*Atlanta Journal*.

Gas masks designed for civilians in war make humanity look as much like an ass as going to war proves we are.—*Dallas News*.

Disagreeable old gentleman: "And this, I suppose, is one of those hideous caricatures you call 'modern art.'"

Art Dealer: "No, sir. That's just a mirror."—*Exchange*.

Wife: "I've put your shirt on the clothes horse, Jim."

"What odds did you get?"—*Weekly News* (Auckland, New Zealand).

"What's your time?" asked the old farmer of the brisk salesman.

"Twenty minutes after five. What can I do for you?"

"I want them pants," said the old farmer, leading the way to the window and pointing to a ticket marked, "Given away at 5.20."—*Christian Observer*.

Barber: "How is the razor, sir? Does it go easy?"

Man: "Well, that depends on the operation. If you're shaving me it goes hard, but if you're merely skinning me it goes tolerable easy."—*Sheboygan (Wis.) Press*.

The boss related an original joke to the various employees in the office, who all laughed uproariously—except Jones.

"You don't find my little joke very amusing, Mr. Jones?" asked the boss ominously.

"I don't have to—I'm leaving tomorrow," came the reply.—*Nebelspalter, Zofingen*.

Aunt Agatha dropped in for a chat. "Oh Auntie, how ugly you are!" said her little niece.

"But Eva," cried her mother, horrified, "How can you say such a thing?"

"I just said it as a joke, Mama!"

"It would have been a much better joke if you had said, 'Oh Auntie, how pretty you are,'" chided her mother.—*Neues Wiener Journal, Vienna*.

A Highbrow: Steinmetz of General Electric fame, defined a highbrow as "any person educated beyond his intelligence."

—*Kitchener Record*.

Standing up on the Job: Unrest is spreading in the United States. There are now rumors of a stand-up strike of sedentary workers.

—*Punch*.

The Stork's Bill: "The stork has a particularly long bill," observes a naturalist. Every young father knows that.

—*Punch*.

Probably He Trudged Along: An Australian during the war tried to enlist. He was refused on medical grounds, on account of bad feet. Next morning he presented himself once more before the doctor.

"It's no use, I can't take you. You couldn't stand the marching," said the physician. "But why are you so insistent?"

"Well, doc," said the other, "I walked 187 miles to get here, and I hate to walk all the way back!"

—*Moncton Transcript*.

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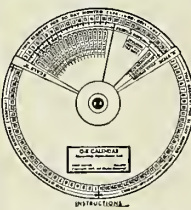
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No. 6

POSTGRADUATE EDUCATION IN MEDICINE

JAMES D. BRUCE, M.D.

ANN ARBOR, MICHIGAN

Postgraduate teaching in medicine is of comparatively recent development in this country. Prior to a little over fifty years ago the medical graduate in search of further educational opportunities was forced to look to the Old World medical centers, Paris, Vienna, and Berlin on the continent, and London and Edinburgh in the British Isles. The discoveries of Pasteur toward the end of the nineteenth century were bringing about great changes in the practice of medicine and offering renewed hope in many of the most baffling problems, both in medical and surgical fields. The rapid advance in medical science which followed these discoveries necessitated changes in undergraduate medical school teaching and created a demand for instruction on the part of the practising profession whose training antedated the new science. To meet these needs undergraduate medical schools extended their teaching facilities and postgraduate schools began to come into existence.

Among the many services of the American Medical Association to the medical profession and to health security in American life, the inquiry into and regulation of medical school curricula were of outstanding significance. In the late nineties there were in the United States approximately 170 undergraduate schools—seven at one time in Michigan. Most of these were inadequately prepared, either in personnel or equipment, to meet the rapid advance of science. After a thorough investigation by the American Medical Association, standards were set up that resulted in the discontinuance of about two-thirds of the medical schools. With the reorganization of the undergraduate medical schools and the growing demand for postgraduate instruction, particularly in the rapidly advancing science of bacteriology

and in the technics made possible through this knowledge, former members of the faculties of many closed schools organized for postgraduate teaching; and a number of undergraduate schools began to admit graduates in various undergraduate courses, as well as to establish short, special postgraduate courses. After varying periods many of the newly formed postgraduate schools were discontinued, as well as most of the postgraduate programs in the undergraduate schools, and for several years there were few opportunities for postgraduate instruction in this country.

With evidence of such obvious needs for postgraduate education, one may wonder why both the undergraduate school offerings and those of the newly established postgraduate schools were discontinued. In the case of postgraduate instruction in the undergraduate school, the courses for practitioners were given in the summer months when the senior faculty members were on vacation and the teaching usually was delegated to junior men of limited experience. Of importance, too, was the absence of an authoritative directing and correlating agency. In

the postgraduate schools, inasmuch as they were staffed almost entirely by men whose major interest was in practice, the relation of basic knowledge to modern technics was not stressed. Thus neither program adequately met the needs of the practitioner.

Recognizing the lag between medical knowledge and its application and availability, the American Medical Association began urging the development of postgraduate instruction. Among the early references to postgraduate education in publications of the American Medical Association is a communication from Dr. W. C. Gates of Bucyrus, Ohio, in the May, 1907, number of the *Councilors' Bulletin*.⁴

"For many years I have felt the need of systematic postgraduate medical study and I know that many of my professional brethren feel the same need. . . . I think that the American Medical Association ought to take up some method of reaching and helping its members and others in postgraduate study at home. . . ."

"With good men at headquarters, outline courses of study could be prepared in pamphlet form. . . . A graduate student (country physician or other) could send in for the pamphlet outline on any given disease in which he was most interested at the time, the instructors could answer his questions and give him the benefit of all that is valuable in the new books and journals. . . . If the physician chose to take an examination in the subject after a proper amount of study, he could receive credit, and a certain amount of credit would entitle him to a certificate. . . ."

The editors, Dr. George H. Simmons and Dr. Frederick Green, commented editorially on the above:

"Dr. Gates has outlined substantially the same plan that has been under consideration for several years past, but which has not been put in operation for various reasons. The advantages of such a plan are unquestionable. It is probable that something along this line will be inaugurated just as soon as there is a sufficiently wide interest taken to justify such a measure."

During this and the preceding year Dr. J. N. McCormack, Chairman of the Committee on Organization, had been employed by the American Medical Association to visit various states in an effort to perfect medical organization and to stimulate interest in postgraduate education. References in many state journals to these visits show evidence of reviving interest in the national organization as well as in postgraduate education.

At the June meeting of the Association in Atlantic City in 1907, there was considerable discussion on the problem of postgraduate education. Dr. John H. Blackburn of Bowl-

ing Green, Kentucky, was requested by the Committee on Organization to submit a plan for general use similar to the one he had introduced in his own county society. This program consisted of a four-year course of study designed for general practitioners. The schedule called for a meeting to be held weekly, preferably in the evening, and to consist of discussions on anatomy, physiology, bacteriology, pathology and treatment. This program was adopted by the American Medical Association for county medical societies throughout the United States. The outline in detail may be found in the *Journal of the American Medical Association* for September, 1907. The following comment on the Blackburn plan appeared editorially in the *Councilors' Bulletin*⁵ for September, 1907:

"When one contemplates the future of such a plan he sees almost infinite possibilities in it. The thought of the organized medical profession of the United States, over 70,000 in number, forming a vast self-established, self-taught school for postgraduate instruction and for the improvement of the individual, earnestly striving to increase the usefulness of each member and to make him of more value to the profession and to the public, is most inspiring . . . and, if adopted, should be taken up, not in the spirit of emotion or temporary enthusiasm, but with deep and serious determination . . ."

In the *Bulletin*² for November, 1908, appears the following:

"So much has been said both in *The Journal* and in *The Bulletin*, regarding the postgraduate study course for county societies that it is unnecessary to go into details regarding it. This course has now been in operation for a little over a year. The pamphlet containing the second year's outline has been printed and distributed. . . . Up to date 84 counties have reported that they have taken up the work. . . . The advantage of all the societies and clubs doing the same work and at the same time is evident." (The course of study was planned to begin in all county societies on the same date.)

County societies varying in number from one each in Alabama, California, North Carolina, Nebraska and Texas, to twenty-two in Pennsylvania were in operation in the second year. During the preceding year two Michigan societies adopted the program—Calhoun County (the Battle Creek Club) and Berrien County Medical Society at St. Joseph.

Editorial comment on the progress of the program was made from time to time in the lay press as well as in the medical journals. Under the heading, "A Commendable Move," is the following paragraph from the

West Virginian (Fairmont, West Virginia)⁸:

"It is very gratifying to the public to learn that a majority of the doctors of Marion County attended the lecture of Dr. McCormack Saturday afternoon and to know that those present entered into the spirit of the meeting and were in accord with the teachings set forth and ready to support the principles by which they could become better servants of the public and stronger men in their profession. . . . It was a pleasure to see how eager they were to take up the postgraduate or University Extension course as planned by the American Medical Association. . . . This course will be a benefit to every physician in the county, and we feel proud that Marion County has so many doctors who are willing to take up this work which is intended to make them stronger men in their profession."

Of interest to Michigan physicians is the following comment in the *Journal of the American Medical Association*⁹ for November, 1907, under the title, "Postgraduate Work Successful in Battle Creek:"

"Dr. Wilfred Haughey of Battle Creek reports that the Calhoun County (Mich.) Medical Society has organized two postgraduate clubs, one in Battle Creek and one in Albion. . . . The program . . . extended over 20 weekly meetings and four subsequent special meetings. . . . In June the Battle Creek Medical Club was organized, only members of the Calhoun County Medical Society being eligible. . . . This work is attracting favorable comment not only from the physicians of the county but from the public as well, as shown by the following news item from one of the local papers:

"The Battle Creek Medical Club, which has been recently perfected and which has for its purpose the study of postgraduate work, now has a membership of about fifty physicians. The management of the Nichols Hospital has kindly donated the use of several rooms, where weekly meetings have been held on Monday evenings. That great interest has already been taken in the work of the Club is evidenced by the fact that the weekly average attendance is between thirty and forty."

"Where such organizations (for postgraduate instruction) are effected, however, great care should be exercised that they in no way depart from the original purpose for which they were established and that the other members of the society are given no reason to feel that the smaller organization is in any danger of monopolizing the parent society. The Battle Creek Club will certainly be of great value to all its members and will prove, we hope, the model on which may be based many similar organizations."

A report of "Medical Society Postgraduate Work" in Scranton, Pennsylvania, appears in the *Journal of the American Medical Association*¹⁰ for September, 1907.

"A typical example of how much can be accomplished by the medical society of a city with a population of scarcely more than 100,000 is to be found in the work of the Scranton (Pennsylvania) Clinical and Pathological Society, which, by admirable organization, though without very much effort, has succeeded in bringing a considerable amount of postgraduate instruction to the physicians of the district. . . . A special fee of \$20 was charged for a course of twenty lectures and altogether over twenty

men attended. . . . All who participated in this course were pleased with its practical nature. . . . The number in attendance increased and neighboring towns even ten miles away awakened to the possibility of participation. . . . Among the members of the class there is a feeling that instruction received in this way is likely to be even more beneficial than when taken in a regular postgraduate institution. Absence from home for a month or six weeks involves so much expense that the student physician is likely to try to acquire more than he can really grasp, without appreciating how much of it he may be able to use in his practice. When the instruction is spread out over a year and is taken at the same time that practice continues, its application to the clinical examination of patients is much more clear and the temptation to establish various progressive features of recent medical advance in actual practice is very great."

In reporting progress in the postgraduate program at the annual meeting¹¹ of the American Medical Association in June, 1907, Dr. McCormack said:

"After the course is well under way, if it proves as practical and successful as is anticipated, it may come about that county societies will be asked to appoint committees and conduct examinations on blank forms furnished, probably at home, under an implied pledge not to seek textbook or other aids, something after the Chautauqua idea, and that a certificate will be provided, all free of expense to those who take the course to the satisfaction of their county society. The necessity of doing something in this direction, and the magnitude of the problem, will be appreciated when it is known that a large majority of the 122,000 licensed physicians who are treating sick people every day do not attend medical meetings, and that a large per cent of this element do not read research periodicals or standard literature. I am convinced that this is entirely practical, that excellent teaching can be developed in a majority of the county societies with little or no outside aid, except from the councilors, printed matter, and weekly elaboration in the journals, and my idea is for the Association to take the work up in a comprehensive way and to prosecute it year after year, until, with coöperation of the Council on Education and state boards, a competent up-to-date physician has been placed within the reach of every family in the United States."

The county societies adopting this method increased in number from eighty-four in the first year to 202 in the second³ and finally to 350 in the fourth year.¹ However, interest gradually diminished, one society after another abandoning the program until the American Medical Association finally discontinued publication of the outlines.

Postgraduate Education in Michigan

In 1893, the Board of Regents of the University of Michigan authorized the faculty of the Medical School to admit medical graduates to one or more of the undergraduate courses. In addition, several new and independent courses were offered to gradu-

ates. These courses included hygiene, bacteriology, electrotherapeutics, microscopic and gross pathology, physiology, histology, chemistry and therapeutics. The courses were given once a year in the summer and were usually six weeks in length. This program continued with some interruptions until 1920, when it was discontinued. As a substitute, one day of teaching each month was offered in the form of a composite program for practitioners. Each of these plans was well received by the profession but attendance gradually decreased and each, in turn, was discontinued.

In 1899, an excellent clinic was inaugurated by the Detroit College of Medicine and Surgery* for Commencement Week. It consisted of lectures and demonstrations from 8 a. m. to 5 p. m. each day. From 11 a. m. to 1 p. m. the program was conducted by a distinguished visitor, while the remaining hours were taken over by members of the College staff. This program was continued until 1917, when a one-day clinic replaced it.

Soon after the War, the Michigan State Medical Society inaugurated postgraduate conferences consisting of one or two days of teaching once or twice a year in the councilor districts of the State. This plan was continued for several years with good attendance and sustained interest. However, as time went on it became increasingly apparent that there was a growing demand for a type of instruction that included greater continuity and more academic direction. It is of interest to note that the next step in the Society's progress in the educational field did not come through failure of the postgraduate conference plan, but was instituted when this program was operating at its greatest efficiency. While the present program has largely replaced it, the postgraduate conference, as conceived almost twenty years ago, is still an important factor in the Society's educational activities.

The Present Program

In January, 1926, representatives of the University of Michigan Medical School and of the Detroit College of Medicine and Surgery were invited to meet with the Council of the Michigan State Medical Society at Ann Arbor to consider ways and means of meeting the rapidly growing needs for post-

graduate study in Michigan. The officials of the Council presented a résumé of their efforts in this field, the difficulties experienced, and their observations of the growing needs and demands. President Little of the University of Michigan and the faculties of both schools responded sympathetically, and a committee of three, representing the two medical schools and the Michigan State Medical Society, was assigned to study the problem for a year and report at a similar joint conference at the next annual meeting of the Council. In February, 1927, the Committee presented its report to the Council, the President of the University, and representatives of the two medical schools.

Abstract of the Committee Report:¹²

1. The statement of the Council of the needs of the practising profession was concurred in.
2. The Committee believed the obligation to inaugurate and maintain a program of postgraduate education should be assumed by the University of Michigan by virtue of its State support. "This does not mean that all postgraduate medical study should be conducted at the University Medical School and Hospital. There are many centers in this state and nation distinguished for special attainment in the various departments of medicine which should be made accessible for postgraduate study, and to which physicians should be recommended and sent for advanced and special work. The University Medical School, in which postgraduate study in medicine is offered and administered, should seek and maintain the very closest coöperation with those extramural centers with a view to utilizing their facilities. Physicians in these centers who have distinguished themselves might be invited to become extramural members of the faculty of postgraduate medical instruction."
3. The Committee recommended that a Department of Postgraduate Medicine in the Medical School of the University of Michigan be established to direct these activities, rather than the institution of a new and separate organization or school, at least in the beginning.
4. A tentative schedule of study periods was suggested.

The report was fully discussed by members of the Council and the visiting faculties. There was complete accord with the recommendations. Dean W. H. MacCracken and Dr. A. P. Biddle, representing the Detroit College of Medicine and Surgery, stated that the Detroit school could assume neither direction nor financial support, but promised coöperation of its faculty, together with use of laboratories and buildings if and when any part of the program should be developed in Detroit. President Little on the part of the University promised to place the matter before the Board of Regents with his approval. This he did in a communication to

*Now Wayne University College of Medicine.

the Board on June 17, 1927, proposing the establishment of a Division of Postgraduate Medicine. In the absence of Regent Sawyer the matter was laid upon the table for consideration at the next meeting of the Board. On June 24, "The subject of postgraduate medical courses was taken from the table. The Board approved the establishment, within the Medical School, of a Department of Postgraduate Medicine and named Dr. James D. Bruce as the head thereof . . . with the provision that during the year 1927-28, a beginning would be made toward placing the work of this Department in operation . . . under the usual conditions governing a department of the Medical School."¹⁵

At the annual meeting of the Michigan State Medical Society in 1928, the Council approved the following named Committee to assist in the further study and direction of a postgraduate program.*

Representing the Michigan profession—Dr. Guy L. Kiefer (Michigan Department of Health), Dr. A. P. Biddle, Dr. James E. Davis, Dr. Wm. H. Marshall.

Representing the Council—Dr. John B. Jackson, Dr. J. H. Dempster, Dr. B. F. Corbus, Dr. F. C. Warnshuis, and Dr. James D. Bruce, Chairman.

A committee for Detroit,† where teaching was contemplated, was nominated by the Wayne County Medical Society and confirmed by the Council:

Dr. J. Milton Robb, Chairman, Dr. G. V. Brown (President, Wayne County Medical Society), Dr. Chas. S. Kennedy, Dr. Alex. Blain, Dr. James E. Davis.

Steps in Program Development

The first teaching program took the form of the four- and six-week general practitioners' courses. However, one or two years' experience indicated that in many ways these did not meet the need. Studies of the literature and of our own educational needs in medical practice showed that a practitioner of average training might continue to practice five years without contact with a medical center and still acquire the newer methods when opportunity offered. After ten years a longer period would be necessary

and greater difficulties experienced. After fifteen years' absence from formal study it was almost impossible to conform with the practices of the day. During the past thirty or forty years, advances in medicine have been so rapid and so specific that a lack of the knowledge developed in any five-year period renders a practitioner to that extent less able to give a desirable quality of service.¹³ If these observations be substantially correct, it would then seem necessary that a practitioner plan to acquaint himself with medical progress during each five-year period.

Further surveys showed that the general practitioner attended a postgraduate course only once or twice during his professional life, usually after long separation from undergraduate study, when he had lost to a great extent the art of note-taking and concentration. The large number of subjects covered during the period of the month and six-week courses and the incompleteness of many presentations did not lend themselves to effective teaching. Also, relatively few practitioners were able to arrange their work so they could be absent from practice from four to six weeks at any one period.

In consideration of these observations the field of medical practice was then divided into eight sections. One-week, intensive courses in each section were presented at intervals throughout the year in the intramural centers of Ann Arbor and Detroit. This plan enabled a practitioner to concentrate on subjects of special interest and needs, and to take one or more courses as his time and inclination permitted. The plan proved more effective and a marked increase in attendance followed, although after four years only a relatively small percentage of the practitioners of the State were availing themselves of the opportunities.

In 1933-34, the Michigan State Medical Society made a study¹⁴ of postgraduate attendance in Michigan and four nearby states. These studies were based upon a questionnaire which included twenty-nine questions, carefully formulated, to test knowledge of current practices. Four hundred and thirty-nine fully completed replies were tabulated, representing about equally city, town, and country practice. Of this number only 29 per cent had engaged in postgraduate study for a period of one month or less during the previous ten years.

*The present committee is composed of the following members: Dr. R. B. Allen, Dr. A. P. Biddle, Dr. C. T. Ekelund, Dr. L. E. Holly, Dr. George A. Kamperman, Dr. Grover C. Penberthy, Dr. R. H. Pino, Dr. J. H. Powers, Dr. C. C. Slemmons, Dr. R. R. Smith, Dr. T. G. Yeomans, and Dr. James D. Bruce, Chairman.

†The committee for Detroit for the present year is as follows: Dr. J. Milton Robb, Chairman, Dr. T. R. K. Gruber (President, Wayne County Medical Society), Dr. Chas. S. Kennedy, Dr. Alex. Blain, Dr. James E. Davis, Dr. David Brachman, Dr. Wm. M. Donald.

About 40 per cent attended less than six medical meetings a year, and of this number 15 per cent attended none. The principal reasons given for failure to engage in postgraduate study were inaccessibility of courses, cost, reluctance to leave practice for the length of time involved in the average course, lack of appeal of the programs and, not infrequently, indifference. A program eliminating as far as possible these objections therefore was necessary.

In the continuing education of either the family doctor or the specialist the tendency of the teacher-clinicians and the interest of the student-practitioners turn naturally toward the clinical applications. In the ordinary course of events the practitioner is removed further and further from the science which underlies sound medical practice. To safeguard the balance between fundamental knowledge and practice the teaching must identify, briefly but positively, every new procedure with the underlying principles of its operation. Postgraduate medical instruction should be directed by those intimately in touch with the sources of knowledge in their respective fields; that is, the responsibility for the maintenance of continuing education in medicine should center in the undergraduate medical school where there are teachers trained to give this emphasis, and where outstanding clinicians in private practice may be enlisted for contributions from their special fields. As demand for postgraduate opportunities increases, personnel and equipment may be added from time to time, thereby not only providing for postgraduate needs without duplication but also strengthening the resources of the school for undergraduate requirements.

To provide opportunities for every physician in the State, it was necessary to plan a teaching schedule, suitable in length, content, cost and accessibility, and it was decided to inaugurate, *first*, an extra-mural teaching program in several centers of the State, these centers to be chosen for geographical location, center of population, and hospital facilities; *second*, to continue the one-week intensive intra-mural courses in Ann Arbor and Detroit; *third*, to offer four- and eight-week composite courses in the University summer session, and *fourth*, to provide personal courses of varying length throughout the year to meet individual needs.

Extra-mural Courses

The extra-mural courses consist of one day of teaching a week in each center for eight weeks. Each day is devoted to a subject in the field of general practice. Four hours are given over to clinical and didactic teaching and an hour to general discussion. Local committees provide clinical material, laboratory facilities and other necessities. The teaching personnel is made up of those who have engaged in former programs—the faculties of the University of Michigan Medical School, the Wayne University College of Medicine, and distinguished clinicians interested in medical education. The schedules are so arranged that except in occasional instance a teacher appears only once on a program. Uniformity of presentations is enhanced through the teachers following a common outline prepared in advance in which acceptable practices are brought into alignment with basic conceptions. The same subjects are presented in each center but on different days, so that an unavoidable absence of a physician at one point may be made up by attendance at another. The program consists of a five-year period* which establishes a very desirable continuity. At the end of each year a résumé of the course in volume form is presented, so that at the conclusion of the five-year period a small, up-to-date, working library will have been acquired by all in attendance.

Short, Intensive Courses

Stimulating and informative as the extra-mural program is, a number of physicians will wish to spend a short period in intensive study in a university center where they may review the clinical or pre-clinical fields more thoroughly than is possible in the extra-mural course. To meet this need, eight short, intensive courses, each in a special field, are now offered each year in the intra-mural centers of Ann Arbor and Detroit where library, laboratory, X-ray and autopsy facilities are available. Also, a composite of the extra-mural course is given in Detroit for the convenience of those physicians who are unable to attend the courses in the out-state centers.

*A review of the program of the past two years, together with that contemplated for 1937, would seem to show that a satisfactory review may be completed within a four-year period. Thus the postgraduate period of instruction would be comparable in point of time to the present undergraduate medical course. A decision upon this point will probably be made at an early meeting of the Advisory Committee.

At the end of each year the attending physicians are asked to comment on the courses and to make suggestions for the program for the following year. These observations are carefully considered by the Advisory Committee and have proved very helpful in evaluating teaching methods and personnel, as well as giving a cross section of the practitioners' needs and interests.

Summer Session Courses

It has become apparent that the extra-mural postgraduate teaching of a comparatively few hours each year has stimulated many men to seek deeper penetration through longer periods of intra-mural study in special fields of practice. To provide for this the four- and eight-week University summer session courses are made available, with such modifications as are necessary to meet the needs of the physician. The plan of electing two or more subjects as a composite course is attracting an increasing number of physicians.

Personal Courses

Provision also is made for longer courses to meet a particular need, or for the purpose of specialization. These courses may lead to a Certificate of Proficiency in the Department of Postgraduate Medicine of the University Medical School, or to the Master's Degree in the Graduate School of the University.

The Advisory Committee on Postgraduate Education of the Michigan State Medical Society has recommended certification for attendance on the extra-mural courses at the end of the five-year period. This has been approved by the House of Delegates of the Society. Attendance credit also is recommended for the intra-mural courses in Ann Arbor and Detroit, and for comparable study in other medical centers of the country. Under present arrangements there are four methods whereby the practitioner may maintain a desirable standard of efficiency and qualify for certification: (1) through attendance on the eight intra-mural intensive courses which may be taken in one year, or over a period of five years; (2) through attendance on the extra-mural courses over the five-year period; (3) through attendance on the composite of the extra-mural course given yearly in an intra-mural center over the five-year period; (4) through comparable study periods here or elsewhere.

Each year medical men are enrolled from approximately one-half of all the cities and towns in the State as well as considerable numbers from neighboring states. In 1935-36, there were 1,135 physicians registered in one or more courses.

Announcement of Courses

All physicians in Michigan who are listed in the American Medical Association Directory, whether members of the State Society or not, receive notices well in advance of the beginning of the courses. Also, notices are carried in the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY, in the *Journal of the American Medical Association*, and in the newspapers of the State. To meet the occasional criticism of physicians for absence from their offices during the extra-mural sessions, the public is informed through newspaper notices of the hours of the teaching schedule and of the place of meeting and telephone number. The following notice was initiated by Dr. L. F. Foster, State Secretary, in the Bay City district in 1935 and approved for use in all other centers in 1936.

Announcement

"The public is requested to coöperate with the profession in refraining from all requests for non-urgent medical services between the hours of 10 a.m. and 3 p.m. on the next eight Mondays.

"This is to enable all the physicians to attend the Postgraduate Medical Courses being given on those days at the Mercy Hospital. For urgent and emergency calls your physician, who will probably be in attendance, may be reached by calling the Nurses Home at Mercy Hospital."

From the beginning practically all of the important newspapers of the State not only have given notice of the programs but have commented editorially upon their importance as a public service.

Financial Support

The cost of the program—from fifteen to twenty thousand dollars a year—has varied little since its inception eight years ago. In the beginning the University bore the entire expense except for a small income from student fees. The fees have been kept low that attendance might not be discouraged during the depression period which began in the second year of the program. The extra-

mural courses given in the autumn and the practitioners' course in the spring (a composite of the autumn course) have carried no fees. This is true also of the course in Pediatrics which is a contribution of the Michigan Division of the American Academy of Pediatrics. The other short, intensive courses have carried fees of from five to twenty-five dollars each, and the personal courses, given at the University, carry a charge of twenty-five dollars a month, with a reduction of fifty dollars if registration is for one year.

At the present time the sources of income* are approximately as follows:

Contribution from Michigan State Medical Society	10%
Fees	20%
Contributions from Foundations† and interested private sources	24%
University appropriation	46%

Teachers receive twenty dollars a day plus travel expense for extra-mural engagements and ten dollars an hour in the Detroit center. The latter amount had to be reduced during the depression. A charge for the extra-mural courses and a slight increase in the tuition for the others would make the program more nearly self-supporting. However, the representations of the medical profession that a program of continuing education was clearly in the public interest were so urgent that the University administration felt justified in incorporating this program into the Medical School budget.

Summary

The principles upon which the Michigan postgraduate program is formulated may be summed up as follows:

First.—That there is a discrepancy between medical knowledge and practice and a desire on the part of the practitioner to bridge the gap.

Second.—That the sympathetic support of medical schools and hospitals is necessary to effective, coöperative planning.

*While not changing materially the plan of administration, the possibility of Federal financial support of this program must be kept in mind. Last autumn a six-week course in obstetrics was given by Dr. Alexander M. Campbell and Dr. Norman F. Miller in the upper part of the lower peninsula. The expense of this course was about \$1500, which was paid from a Federal grant through the Michigan Department of Health. This year a four-week program in pediatrics is contemplated in the same area and, also, a four-week program in obstetrics in the upper peninsula. Both of these projects will be supported by Federal funds through the Michigan Department of Health.

†Children's Fund of Michigan.

W. K. Kellogg Foundation.

Horace H. and Mary A. Rackham Fund.

Third.—That the University of Michigan has an obligation as a state tax-supported institution to give financial support and direction to a movement so obviously in the public interest.

Fourth.—That postgraduate education should center in an established medical school.

A pioneer⁶ in postgraduate medical teaching some years ago gave four significant reasons for the partial failure of the program with which he was connected. First, the failure of the hospitals to participate in the movement. Second, the lack of understanding on the part of the academic group of the need of the practitioner. Third, the lack of method and experience in teaching of many of the willing volunteers. Fourth, the apathy of the profession as to its needs for further study. Warned by this experience, postgraduate medical teaching in Michigan has not been handicapped by any of these difficulties. *It has had the co-operation of the medical faculties and the sympathetic support of the hospitals from the beginning. It has had a sufficient number of experienced teachers, even in the early days of its activities, and the profession of Michigan has shown itself anxious to take advantage of the opportunity to increase its effectiveness. The entire program is based upon a united effort of the medical schools, the hospitals, and the organized profession of the State.*

In contrast to many other postgraduate programs, this plan from its inception has had as its basic objective the continuing education of the medical profession of the State of Michigan. Although additional courses for specialists are being offered as a part of an expanding program, the continuing education of the general practitioner still remains the basic concept.

The intangible results of a postgraduate program of the character of the Michigan plan are not inconsiderable. In addition to professional advancement there has been a decided improvement in the morale of the medical profession of the State and evidence of a coöperative, helpful attitude of one physician to another, stimulated by the classroom contacts. Also, there has developed a teaching talent in many well-informed practitioners and specialists which hitherto had not had opportunity to express itself. But possibly more important than all, the

standards of social responsibility of the profession have gone forward as well as those of medical practice, with the evidence of a renewed confidence on the part of the public.

References

1. Blackburn, Dr. John H.: Personal communication, April 14, 1937.
2. Bulletin, Am. Med. Assoc., Nov. 15, 1908.
3. Bulletin, Am. Med. Assoc., Nov. 15, 1909.

4. Councilors' Bulletin, Am. Med. Assoc., May 15, 1907.
5. Councilors' Bulletin, Am. Med. Assoc., Sept. 15, 1907.
6. Jennings, John E.: Bull. N. Y. Acad. Med., May, 1928.
7. Jour. A. Med. Assoc., Sept. 21, 1907, p. 1043.
8. Jour. Am. Med. Assoc., Oct. 12, 1907, p. 1302.
9. Jour. Am. Med. Assoc., Nov. 23, 1907, p. 1793.
10. Jour. Am. Med. Assoc., Sept. 7, 1907, p. 870.
11. Jour. Am. Med. Assoc., June 15, 1907, p. 2043.
12. Jour. Mich. State Med. Soc., March, 1927.
13. Kast, Ludwig: Bull. N. Y. Acad. Med., May, 1928.
14. Postgraduate Medical Education and the Needs of the General Practitioner. Mich. State Med. Soc., 1934.
15. Regents' Proceedings, University of Michigan, June, 1927.

THE CLINICAL APPLICATION OF A COAGULANT SUBSTANCE OBTAINED FROM THE HUMAN PLACENTA*

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Tissue extracts have long been employed as hemostatic agents in the practice of medicine. These extracts, which have been obtained from animal tissues such as bovine lung or sheep's brain and given enterally or parenterally, have been used primarily as specific hemostatic agents. Foreign protein therapy, first introduced by Vines¹⁴ and subsequently elaborated upon by Mills⁷ consisted in producing a local allergic response by the intradermal injection of a minute amount of a foreign protein to which the patient had previously been rendered sensitive. While studying this form of treatment, Eley and Clifford¹ noted that although there was a reduction in the coagulation time of the capillary blood as obtained by pricking the finger, yet the coagulation time of the venous blood remained unaltered. The fact that certain observers^{4,6,8-11} had presented evidence which indicated that tissue extracts possessed a certain degree of specificity for the species from which they were obtained suggested that one might be able to obtain a coagulant from human tissue which would be more specific for humans than the extracts prepared from animal tissues. To add further support that a tissue extract prepared from healthy human tissue might possess coagulant properties were the observations of Sakurai,¹² who in 1929 pointed out that the action of "placental toxins" in reducing the coagulation time of the blood was similar to the action of tissue extracts prepared from animal tissue. Therefore, it seemed possible that one might obtain a coagulant from human tissue which would be more specific for humans than the coagulants extracted from animal tissue.

The preparation of the coagulant need not be discussed at this time as it has previously been described in detail.² However,

it is advisable to call attention to the fact that the blood coagulant extract differs from the antibody solution (immune globulin-human)⁵ obtained from the human placenta and employed as a prophylactic measure in the treatment of measles. The extract possessing the coagulant properties is turbid, brownish in color, is precipitated in acid medium, only slightly soluble in dilute alkalies, and rapidly loses its potency in acid or alkaline solutions or when passed through Berkefeld or Seitz filters. Oxidation or aging, particularly in the presence of fresh blood serum, rapidly destroys its coagulant activity.

In vitro studies showed that the extract possessed strong coagulant properties and that this property persisted even when high dilutions were employed. It was further demonstrated that the coagulant extract would clot re-calcified human plasma more rapidly than would freshly prepared bovine lung extract prepared at the same time and of the same nitrogen concentration. The converse of this was true when re-calcified bovine plasma was used, thus suggesting that there might be some degree of specificity of the extracts for the species from which they were obtained. (Table I.)

In vivo observations on the coagulation time of both the venous and capillary blood

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TABLE I. COAGULATION TIME OF RECALCIFIED HUMAN OR BOVINE CITRATED PLASMA TO WHICH BOVINE LUNG COAGULANT EXTRACT OR PLACENTAL COAGULANT EXTRACT HAS BEEN ADDED

	TIME OF COAGULATION		
	Control	Lung Extract Added	Placental Extract Added
Human plasma A	9'56"	1'45"	1'10"
Human plasma B	10'23"	2'04"	1'19"
Human plasma C	10'50"	2'05"	1'24"
Human plasma D	9'10"	2'08"	1'35"
Bovine plasma A	14'25"	1'0"	2'10"
Bovine plasma B	19'45"	1'45"	3'05"
Bovine plasma C	12'35"	1'25"	2'36"
Bovine plasma D	13'29"	1'10"	2'18"

To 1 c.c. of plasma was added 0.1 c.c. coagulant extract (containing 1.5 mg. N per c.c.) and 0.3 c.c. 2.5 per cent CaCl_2 .

were made following the injection of the extract intraperitoneally into rabbits. These studies showed that there was a prompt reduction in the clotting time of the blood as obtained from the heart and as obtained by pricking the ear and that the reduction persisted for periods varying between forty-eight and seventy-two hours. In the dosage employed in these studies a negative phase, *i.e.*, a period of time during which the blood is rendered non-coagulable, did not develop. When the extract was injected sub-cutaneously or intramuscularly, the effect on the coagulation time was the same as that observed following the intraperitoneal administration. *Intravenous* injections, however, produced intravascular coagulation and death of the animals.

As the effectiveness of the material in reducing the coagulation time of the blood in animals had been demonstrated, it seemed desirable to note its effect in man. Therefore, after having determined the coagulation time of both the venous and capillary blood, 5 c.c. of the extract was administered orally to a normal individual after the manner suggested by Mills⁴ in the use of bovine lung extract. Thirty minutes later, determinations of the coagulation time of both venous and capillary bloods showed that the clotting time of the venous blood had been reduced from six and one-half minutes to one and one-half minutes and that the clotting time of the capillary blood had fallen from two and one-half to one and one-half

minutes. Examinations of the blood were then made at hourly intervals, and at the end of five hours it was observed that the coagulation time had returned to the normal levels. The duration of the effect in the normal human individual was thus found to be the same as Mills had observed under similar conditions following the use of bovine lung extract.

However, when *in vitro* comparisons were made with re-calcified plasma obtained from normal individuals and from patients with hemophilia, it was noted that the blood of the latter group coagulated as rapidly as that of the normal group. Therefore, it appeared advisable to determine its effectiveness in patients suffering from this familial disease.

To date, twenty patients with hemophilia have received this extract at the Children's and Infants' Hospitals of Boston and of this group thirteen have responded satisfactorily as evidenced by a reduction in the coagulation time of the venous blood to within ten minutes. Of the seven that did not respond satisfactorily, three showed a definite reduction, while four failed to show any response (not all of those who failed to respond received intramuscular treatment). The effect of the extract by both oral and intramuscular administration is shown in Figures 1 and 2; Figure 3 shows an unsatisfactory response, and Figure 4, a failure.

The material has been administered both orally and intramuscularly. When given orally it should be preceded by a period of fasting as the presence of digestive juices rapidly destroys the coagulant activity. For this reason our procedure has been to give it in the morning, preceded and followed by $\frac{3}{4}$ ounces of ice cold water. The inclusion of a small amount of calcium carbonate in the first glass of water has been found to establish a state of alkalinity in the stomach which precludes possible destruction of the coagulant by the presence of excessive amounts of hydrochloric acid. A drop of oil of peppermint renders the material more palatable and at the same time accelerates emptying of the stomach.¹³ The intramuscular route has been employed only in those instances where the oral administration has not been effective. Needless to say, caution should be exercised when it is used in this manner as accidental *intravenous* injections may prove *fatal*.

Neither the dosage nor the frequency of treatment can be definitely stated at the present time for not infrequently several trials have to be made before the proper

The response following intramuscular injection has proven to be slow and several hours elapsed before the peak of effectiveness could be noted. If the patient has swallowed

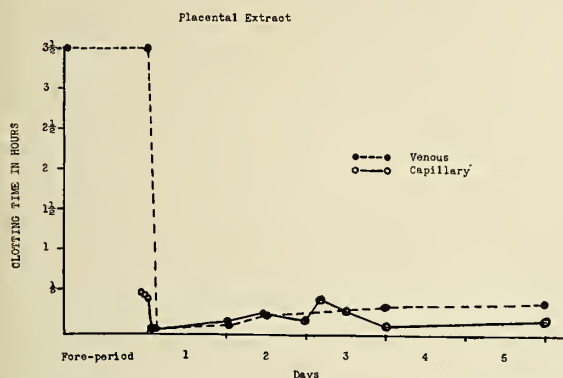


Fig. 1. D. M. Diagnosis, hemophilia; age of patient, six years; family history of hemophilia; brother died from hemorrhage following appendectomy; coagulation time of capillary blood, thirty minutes; of the venous blood, two and one-half hours. Satisfactory response following oral administration.

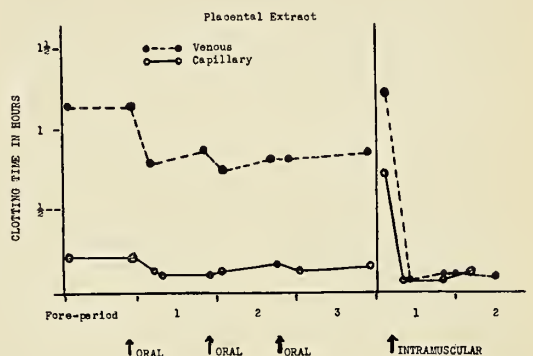


Fig. 2. S. C. Diagnosis, hemophilia; age of patient, twelve years; no family history of hemophilia; coagulation time of capillary blood, twenty minutes; of venous blood, one and one-half hours; no response following oral administration; satisfactory response following intramuscular administration.

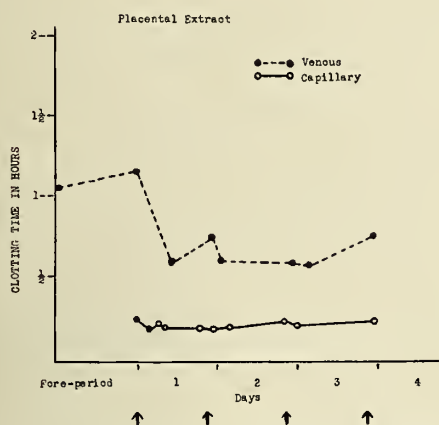


Fig. 3. R. S. Diagnosis, hemophilia; age of patient, six years; no family history of hemophilia; coagulation time of capillary blood, fifteen minutes; of venous blood, one hour and ten minutes; unsatisfactory response to oral administration.

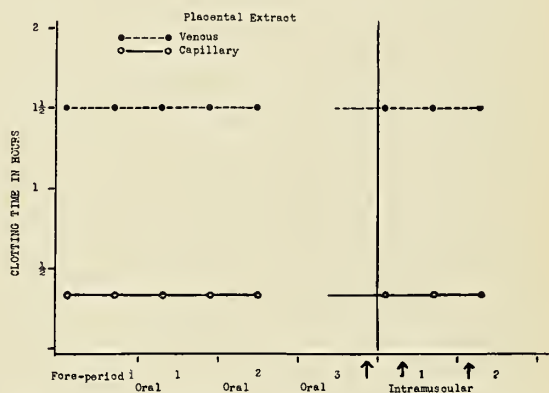


Fig. 4. C. B. Diagnosis, hemophilia; age of patient, four years; no family history; coagulation time of capillary blood, eighteen minutes; of venous blood, one hour and thirty-two minutes; no response following oral or intramuscular administration.

amount can be determined. Usually, 5 c.c. are given first and if there is no response the dosage is gradually increased to 20 or 30 c.c. If this is not effective, the extract is then given two or three times a day, care being taken that it is administered at a time when the stomach is free from food. Intramuscularly, 5 c.c. or 10 c.c. amounts have been employed. When 10 c.c. are used it is advisable to inject the material in two sites, thus avoiding possible local reactions. When given orally the effectiveness can usually be observed within twenty to thirty minutes.

an appreciable quantity of blood the extract is ineffective when given by mouth.

The duration of the effect of the coagulant extract has varied with the individual patient. Therefore, in order to determine the frequency with which it should be given, it was necessary to record the coagulation time of both the venous and capillary blood each day, for in this manner the time at which the coagulation returned to its former level could be observed, thus establishing the interval between treatments. In the majority of instances it has been found necessary to

administer it at seventy-two hour intervals. Older children, and particularly adults, have proven more refractory to treatment than have younger children.

During the course of our observations on these patients the opportunity to determine the effect of the coagulant when applied locally presented itself on several occasions. In each instance, bleeding ceased and a firm clot developed. However, if this clot was accidentally dislodged, bleeding would occur and another topical application would be required. When employed in this manner it is advisable to bring the edges of the wound together with adhesive tape and then place a sponge soaked in a sterile form of the extract over the lesion. The following case illustrates its topical application:

Case 1.—R. S., a known hemophiliac child, was admitted to a neighboring hospital because of a laceration of the scalp which was bleeding profusely. Despite a transfusion and the local application of various commercial thromboplastic substances, the bleeding from the wound continued for three days. At the end of this time a piece of cotton saturated with placental extract was placed firmly over the wound and within five minutes coagulation occurred without subsequent oozing.

Having found the extract of value in the treatment of certain patients with hemophilia, efforts have been made to determine its effectiveness in other conditions.

To date it has been employed in surgical conditions, certain gynecological disturbances and in a limited number of cases of symptomatic purpuras and leukemias. In the group of patients suffering from the blood dyscrasias there has been no demonstrable effect obtained by the oral administration of the material although it has been effective when employed locally to control recurrent epistaxis. In these instances, either gauze or cotton is soaked in the coagulant and then inserted into the nares, care being taken that the material comes in contact with the bleeding point.

Bleeding following tonsillectomy and adenoidectomy has responded favorably to the local application of the material. When the bleeding has occurred as the result of tonsillectomy the results have been less favorable than those obtained when the bleeding was secondary to the adenoidectomy, for in the former group it is difficult to keep the coagulant at the point of bleeding. Oozing following removal of adenoids can be controlled by allowing the material to reach

the nasopharynx through the nose, that is, by using it as one would employ any nasal spray or form of "nose drop." The same procedure has been found effective in the control of hemorrhage following surgical repair of cleft palates.

The coagulant extract has been used both as a prophylactic and therapeutic agent in patients requiring prostatectomies. When employed prophylactically the patients receive one or two drams, three times a day for a period of twenty-four hours prior to operation, as this lowers the coagulation time of the blood before surgical intervention and therefore minimizes bleeding at the time of the operation. The continuation of the treatment for several days postoperatively has been thought to be helpful in preventing bleeding which may occur during the period of the patient's recovery.

Although the coagulant has been found to be of value in certain gynecological conditions necessitating operative measures, sufficient evidence has not been obtained to justify any comment at this time. However, accumulated data have indicated that it is effective in the control of abnormal bleeding which may occur during the menstrual cycle. The following three case reports illustrate its use in this condition (all three of these patients had failed to show any clinical improvement following the usual forms of therapy):

Case 1.—P. C. (Record No. 720) aged twenty-nine. Condition: staining during tenth week of gestation. Diagnosis: threatened abortion. Dosage: oral administration of 1 dram daily for three days. Result: flow stopped after first dose.

Case 2.—M. S. (Record No. 255) aged forty. Condition: metrorrhagia—seven days. Diagnosis: ovarian dysfunction. Dosage: oral administration of 1 dram daily for three days. Result: flow stopped after first dose—recurred four days after last dose.

Case 3.—J. B. (Record No. 245) aged sixteen. Condition: metrorrhagia—daily for eight months. Diagnosis: ovarian dysfunction. Dosage: oral administration of 1 dram daily for three days. Result: flow diminished two-thirds for week after first dose, then increased (same effect three times at intervals of two weeks).

In conclusion one may say that a blood coagulant extract has been obtained from the human placenta which has proven to be of value in the treatment of certain patients suffering from hemophilia. Its effectiveness in other conditions has also been demonstrated but its superiority to the animal tissue extracts in the treatment of these conditions has not as yet been established.

Bibliography

1. Eley, R. C., and Clifford, S. H.: *Am. Jour. Dis. Child.*, 42:1331, 1931.
2. Eley, R. C., Green, A. A., and McKhann, C. F.: *Jour. Ped.*, 8:135, 1936.
3. Hori, E., and Sakurai, K.: *Sei-i-Kwai Med. Jour.*, 49:21, 1930 (Eng. abst.).
4. Loeb, L.: *Montreal Med. Jour.*, 32:507, 1903; *Virchow's Arch. f. Path. Anat.*, 176:10, 1904; *Beitr. z. Chem. Phys. u. Path.*, 5:534, 1904; 9:201, 1907. *Biochem. Ztschr.*, 6:829, 1907; *Ztschr. f. Immunitätsforsch. u. exper. Therap.*, 12:189, 1912.
5. McKhann, C. F., and Chu, F. T.: *Jour. Infect. Dis.*, 52:268, 1933.
6. Mills, C. A.: *Jour. Biol. Chem.*, 40:425, 1919; *ibid.* 46:135, 1921; *ibid.* 46:167, 1921.
7. Mills, C. A.: *Am. Jour. Physiol.*, 76:632, 1926.
8. Mills, C. A.: *Am. Jour. Physiol.*, 76:651, 1926.
9. Mills, C. A., and Guest, G. M.: *Am. Jour. Physiol.*, 57:395, 1921.
10. Mills, C. A., and Matheus, S.: *Am. Jour. Physiol.*, 59:193, 1922.
11. Mills, C. A., Dorst, S., Mynchenberg, G., and Nakayama, F.: *Am. Jour. Physiol.*, 63:484, 1923.
12. Sakurai, K.: *Sei-i-Kwai Med. Jour.*, 48:52, 1929 (Eng. abst.).
13. Sapoznik, H. I., Arens, R. A., Meyer, J., and Necheles, H.: *Jour. A. M. A.*, 104:1792, 1935.
14. Vines, H. W. C.: *Quart. Jour. Med.*, 13:257, 1920.

VARIOUS ANESTHETIC AGENTS, ESPECIALLY SOME OF THE NEWER PREPARATIONS*

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The development of anesthesia in the last ten years has outstripped even the marked advances that were made in the preceding ten years, so that at the present time there is a wide choice of anesthetic agents available. This choice depends, of course, to a large extent on the availability of the agents and the skill with which they will be used. In several institutions today there are well-organized departments of anesthesia which can render better service than is available in a small hospital or in general practice. Fortunately, however, some of the most valuable anesthetic agents are available to the general practitioner and he should inform himself concerning them and master the technic of using them.

Let us first consider the use of local anesthetics. Procaine (novocain) is recognized as the best drug at the present time for injection. Many operations other than laparotomy, and very extensive operations such as radical amputation of the breast, can be carried out under infiltration anesthesia. A 0.5 per cent solution of procaine will suffice, although if the operation is to be a minimal one and only small amounts may be injected, a 1 per cent solution may be preferred in order to minimize the distortion caused by injecting larger quantities of a 0.5 per cent solution. For those individuals who have become sensitive to procaine, metycaine can be substituted, and three-quarters as much of the drug used as compared to procaine.⁶ If the patient is sensitive to procaine, a patch test should be performed before the operation to see that he is not hypersensitive to metycaine. These two drugs represent the two local anesthetics of choice which are available today for infiltration anesthesia. The infiltration method can be extended to the reduction of fractures³ by injecting directly into the hematoma associated with the fracture, or

into the fractured periosteum of the chronic fracture. Sprains² can be treated, at least in part, by infiltration with an anesthetic agent, which will permit the use of the part without much pain. The various methods of regional anesthesia, while valuable, require some training and considerable practice before they are effective in a high percentage of the cases in which they may be tried. However, a block of the perineal nerves near the tuberosity of the ischia is very valuable for use in obstetrics and for certain procedures that have to do with the vagina, vulva and urethra, but it is not useful for operations on the rectum. Infiltration around the anus and rectum will produce sufficient anesthesia for minor procedures on these organs. The only drawback is the distortion produced by the infiltration. In such parts the needle should be kept moving so that not more than a minimal amount of solution will be injected intravenously if the lumen of the needle comes to rest within a vein. When an anesthetic is to be used by instillation such as in the eye, the urethra, or the nose, metycaine is satisfactory. We believe that it is well for the surgeon to use one drug, if possible, which will serve for many uses, rather than to use many local anesthetics and each one only a few times, and thereby have less understanding of the

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effect of each of them than would be the case if one agent was used frequently. The infiltration method has one distinct advantage over most other methods, namely, that additional amounts of solution may be injected if they are needed as the operation proceeds. This eliminates the necessity of using so-called long-acting anesthetic agents, which are not as safe relatively as are the ones which have been mentioned.

The use of vasoconstrictors facilitates the operation by making the field less bloody and restricting the rate of absorption of the agent so that anesthesia is prolonged. Ordinarily, epinephrine (adrenalin) is used in dilute solution, using 6 mm. of 1:1000 (1 c. c. in 2600) in 100 c. c. of 1 per cent solution, or 200 c. c. of 0.5 per cent solution. Certain substitutes have been suggested for epinephrine (one of the newest is cobefrin¹⁰ which is used in a concentration of 1:200,000). These drugs have similar chemical structures and many of their effects are similar; however, cobefrin is effective when administered orally whereas epinephrine is not. Otherwise, the effects are the same if the doses used are gauged to produce similar effects. Cobefrin is said to produce less nervousness and apprehension than epinephrine and is said to last longer than epinephrine when placed in solution with the anesthetic in ampules.

Spinal anesthesia is a useful method if it is not used in cases in which it is contraindicated. Such cases are usually characterized by marked debility. The more marked the debility, the more definite the contraindication. The percentage of hemoglobin often reflects to some extent the condition of the patient so far as spinal anesthesia is concerned, and it is a very definite help to know the degree of anemia that is present. When the percentage of hemoglobin is less than 50, the advisability of using a spinal anesthetic is very questionable. However, if procaine or metycaine is used in a dose of 1 mg. of procaine per pound of body weight, or if a corresponding dose of metycaine is used, and if the total dose does not exceed 200 mg. of procaine or 175 mg. of metycaine for an ordinary well-developed adult who is not debilitated, the results will usually be satisfactory. It is essential from the standpoint of safety to use a safe dose of a spinal anesthetic. If it does not produce a sufficient degree of

anesthesia, if anesthesia does not last long enough, or if nausea and vomiting develop during anesthesia, then general anesthesia should be used to control or supplement the spinal anesthetic.

Of the inhalation anesthetics, the newest one is cyclopropane. While it is a valuable agent in the hands of the experienced anesthetist its effects are not sufficiently understood to warrant its general use. However, when a physician feels that it meets some of his specific needs, it will pay him to visit those institutions where the agent is being used and where he may obtain information on how to use it with relative safety. It is especially valuable for those patients who have pulmonary disease and to whom one cannot administer ether, and when an inflammable anesthetic may be used. The more dilute is the vapor that is used, the safer it is from the standpoint of the patient. Because of the cost of cyclopropane it must be used by the soda-lime absorption method, which has made gas anesthesia relatively inexpensive. The principle of this method is to anesthetize the patient by using tight fitting connections and a well fitting mask so that there are no leaks, then to shut off all anesthetics and gases except oxygen, and to add to the mixture in the bag only a sufficient flow (from 250 to 500 c.c. per minute) of oxygen to maintain good color of the patient, and to keep the bag nicely filled (a pressure of 5 millimeters of mercury in the bag) at the height of respiration. This is accomplished by passing the gas through soda-lime. The gas machine must obviously be devised to permit these various manipulations. On the other hand, there are times when one would rather add carbon dioxide than remove it. This is especially true in anesthetizing certain frightened patients, especially when nitrous oxide or ethylene is being used, and in certain obstetric cases when the mother will hold her breath and bear down rather than breathe as she has been directed. If one wishes to control respiration, the addition of carbon dioxide is of relative value, depending on how important it is to control respiration. The modern gas machine is usually equipped with a cylinder of carbon dioxide. It is important that the mechanism be arranged so that the flow of carbon dioxide is markedly limited so that it will be almost impossible to fill the bag suddenly with this gas,

which is dangerous if given in overdose, as is true of the anesthetic gases. In cases in which patients have a communicable pulmonary disease such as tuberculosis, it is important that the parts of the gas machine through which the patient breathes be thoroughly sterilized after its use in such cases or that certain parts of the machine be protected by various devices so that fewer of them will then need to be sterilized. An ingenious device is to use a water bottle trap as suggested by Magath. Such developments will be incorporated in the gas machines in the near future.

One of the most usable methods and at the same time one of the most valuable methods in general inhalational anesthesia has been the introduction by Magill of a large soft rubber tube for the intratracheal administration of inhalation anesthetics. After the patient's throat has been sprayed with 5 per cent solution of butyn or 10 per cent solution of metycaine and surgical anesthesia has been produced, one can easily pass the greased tube into the nose and thus into the trachea more than half of the time without incident, and without looking into the throat. If, however, the tube does not enter the larynx easily, it may be necessary to reanesthetize the patient and to use a lighted tongue depressor or laryngoscope to raise the epiglottis so that one may pass the tube into the larynx under direct vision. The use of this tube of large caliber, through which the patient may breathe freely, even more freely probably than without it, is one of the outstanding advances in anesthesia and one that the general practitioner should familiarize himself with. The tubes are not expensive, and although the laryngoscope is expensive, it is a long lasting instrument and is operated by a small and inexpensive battery, much the same as that used in flashlights. The method is one that must be generally understood in the future because of the great interest in resuscitation that is sweeping the nation. There is nothing that so facilitates respiration, especially in artificial respiration, as the introduction of the intratracheal tube through the larynx into the trachea. The introduction of the tube also facilitates the administration of nitrous oxide, ethylene, cyclopropane and ether, both diethyl ether and divinyl ether. Divinyl ether (vinethene) is usually used only for short op-

erations or in certain obstetric cases in which intermittent analgesic action is desired. It is used often for such operations as myringotomy. The intratracheal method may be used to eliminate the anesthetist from the field of operation. By connecting the tube to the gas machine or anesthetizing device by a narrow connection, the mask and the necessity for holding the mask in place is eliminated. The tube may be simply inserted and fastened with a safety pin or fastened to the nose or lip by adhesive tape, and ether may be administered by open drop method by placing the mask over the face, after making sure that the end of the tube is also under the mask.

Rectal anesthesia induced with olive oil and ether has been used advantageously in labor and its use is familiar to you all. Tribrom-ethanol (avertin), however, has been more recently used and, although anesthetic doses many times may be administered satisfactorily and safely to children, its administration to adults must be limited to doses which provide only basal anesthesia. This effect must be supplemented by a local or general anesthetic agent. Its use in obstetrics has not been more satisfactory than that of olive oil and ether, because restlessness occurs because of the necessarily small dose used. Administration of barbiturates by rectum must usually be limited to doses which produce only basal hypnosis, although in convulsive conditions such as tetanus, strychnine poisoning, and eclampsia, they may be administered advantageously in very large doses. Even in such cases, however, it is questionable whether they are more effective than avertin, even though the barbiturates are more convenient to use because they may be administered in the form of capsules. In general practice it may not be as convenient to prepare a solution of avertin as to use the barbiturates. Avertin may be supplemented with barbiturates in conditions such as tetanus, in which they may necessarily be used as an adjunct to treatment for days or weeks. Administration of barbiturates by rectum is of considerable advantage in the transportation of psychotic individuals or in the alleviation of pain in cases in which patients have been mortally wounded or are moribund from burns. It also is a splendid means of preparing patients to be transported many miles from the scene of an accident.

Intravenous anesthesia is becoming fairly well established in institutions where there are a sufficient number of experienced individuals to administer the drugs with relative safety. It should not be administered to patients who are ten years of age or younger, because respiratory depression occurs and the respiratory passages of children are small and respiratory depression therefore is much more significant than it is among adults, whose respiratory passages are larger. The use of so-called respiratory stimulants in addition to the intravenous anesthetic has been suggested,⁴ but their advantage, especially when administered to animals, has been debated. We have, however had considerable experience with the use of pentothal sodium intravenously with respiratory stimulants, having used it in 1,470 cases from October, 1935, to January 1, 1937. Our experience indicates that the combined use of one part of coramine and four parts of pentothal sodium is a relatively safe procedure. The benefit from the use of intravenous anesthesia in general practice is questionable. The technic is that of intermittent administration during the period of operation requiring anesthesia.⁷ This requires that some person be able to retain the needle in the vein and inject small doses intermittently as they are needed, which complicates procedures in general practice and is frequently not feasible at all. At present, the method need not be considered good in general practice, although in office practice it may become useful. The two drugs which are most widely used for this purpose at present are evipal soluble and pentothal sodium. Both induce anesthesia quickly and to a moderate degree, and their effects are transient. Pentothal sodium is more potent than the evipal soluble and smaller doses are required to anesthetize resistant patients. However, either of the drugs may be used in operations usually considered suitable for intravenous anesthesia, namely, short durations which do not require much muscular relaxation. These drugs are not often suitable for laparotomy. They are of value, however, in general practice if small doses are used just to induce anesthesia, and if an inhalation anesthetic is administered subsequently. This method has the advantage of producing a pleasant induction and bringing the patients to a condition where they do not resist the adminis-

tration of a general anesthetic as much as they would otherwise. However, somewhat similar effects may be produced by the judicious use of preliminary medication.

Our favorite medication⁵ is the use of pentobarbital sodium (nembutal) in doses of $1\frac{1}{2}$ grain (0.097 gm.) at bedtime the night before operation and repeated again the following morning on awaking. A sixth of a grain (0.01 gm.) of morphine and $1/150$ grain (0.0004 gm.) of atropine sulphate are administered by hypodermic injection at least thirty minutes prior to induction of anesthesia. Other drugs may be used, but we find this combination to be a satisfactory one prior to administration of gases, gas and ether, intravenous anesthesia, or local and regional anesthesia. However, preliminary medicaments are not always used before the administration of avertin by rectum or before the administration of ether by the open drop method.

Consideration of the use of chloroform is purposely avoided and so far as the use of ethyl chloride is concerned, this has been supplanted, we think, very largely by divinyl ether. If ethyl chloride is to be used, however, it should be administered by the drop method and not by spraying it on the mask when general anesthesia is to be induced, and if it is to be used as a local anesthetic a ring of tissue should be frozen around the region to be incised rather than freezing the region itself and then trying to incise through this frozen area. Divinyl ether is useful for short operations in which evipal sodium or pentothal sodium might be used intravenously, and also in certain obstetric cases.¹

References

1. Bourne, Wesley: Vinyl ether obstetric anesthesia for general practice. *Jour. Am. Med. Assn.*, 105:2047-2050, (Dec. 21) 1935.
2. Kiser, J. B.: Procain and epinephrin injection in the treatment of sprained ankles—report of cases. *Virginia Med. Month.*, 63:554-555, (Dec.) 1936.
3. Leriche, René, and Froehlich, Fritz: Traitement de certaines fractures articulaires pas les infiltrations de novocaïne et la mobilisation active immédiate. *Presse méd.*, 44:1665-1666, (Oct. 24) 1936.
4. Lundy, J. S.: A method of minimizing respiratory depression when using soluble barbiturates intravenously. *Proc. Staff Meet. Mayo Clinic*, 10:791-792, (Dec. 11) 1935.
5. Lundy, J. S.: The relationship of preliminary medication to anesthesia. *Jour. Indiana State Med. Assn.*, 29:363-364, (Aug.) 1936.
6. Lundy, J. S.: The pharmacopeia and the physician. The use of local anesthetics. *Jour. Am. Med. Assn.*, 107:1464-1469, (Oct. 31) 1936.
7. Lundy, J. S.: Intravenous anesthesia. *Am. Jour. Surg.*, 34:559-570, (Dec.) 1936.
8. Magath, T. B.: Personal communication to the authors.
9. Magill, I. W.: Endotracheal anaesthesia. *Proc. Roy. Soc. Med. (Sect. Anes.)*, 22:1-6, (Dec.) 1928.
10. Tuohy, E. B., and Essex, H. E.: A comparative study of the physiologic activity of cobefrin and epinephrine. *Surgery*, 1:564-580, (April) 1937.

CORNEAL LESIONS*

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My first trip to Vienna was in 1907, when I made the same high resolve that you probably have made, namely, to return in five or ten years. However, it was over twenty years before I was again a student in the old Allgemeine Krankenhaus in 1929. During the interval, tremendous strides had been made in medicine. I compared my two visits, with emphasis upon the changes that had taken place in the practice of ophthalmology. I am quite proud of the fact that American medical men have been prominent contributors to these discoveries. Perhaps the most outstanding advance has been made in the wider recognition of the rôle of bacteria and foci of infection in the etiology of many diseased processes. To Billings and Murphy of Chicago and Rosenow of Rochester belongs much credit.

When I began practice, a case of iritis was expected to run from four to eight weeks. No one anticipates such an outcome today. The rôle of foci of infection in iritis is now quite generally accepted and a thorough search shows such foci in the great majority of cases, the elimination of which results in prompt subsidence of the iritis.

When it comes to diseases of the cornea, however, we do not find such widespread acceptance of the idea that foci of infection are important etiologic factors. It is along this line that I wish to speak. I am reminded of an experience I had a few years ago. I was out at an estate that had some wonderful gardens, under the watchful care of a very capable Holland gardener. I noticed in particular the fine roses, all free of pests (so far as my amateur eyes noted), all blooming beautifully. I asked the gardener how often he sprayed his roses and what solutions were used. He gave me a rather vacant stare at first and then answered, "Oh, I don't spray them, you see if you have the proper soil the plants are so strong that they don't become diseased." Then he gave me a very thorough description of the trouble he took to obtain just the right kind of soil to grow roses.

So I think the fundamental factor we must always keep in mind is that normal tissues nourished by a healthy blood supply and lymph flow are well protected from most invading organisms. When tissues in the eye do become diseased, we should always be on the lookout for disturbances in the general body metabolism. In this respect ophthalmologists are often negligent,

especially in treating diseases of the cornea. For example, the chapter on keratitis in an English textbook on ophthalmology does not mention foci of infection as a factor in the causation of any one of the different corneal diseases described, and this is from the latest edition of "Diseases of the Eye," published in 1934. The only suspicion of an exception is noted in discussing keratomalacia when mention is made of the absence of fat-soluble vitamin A, and again, in speaking of herpetic eruptions, "The general health must not be neglected, especially as the patient often becomes very depressed." This text does recognize, however, that superficial keratitis is usually associated with influenza or catarrh of the respiratory tract. Yet it recognizes foci of infection as a factor in the etiology of iritis. I mention this book merely to emphasize the fact that abroad the rôle of foci of infection is not recognized as an etiologic factor in keratitis. This is entirely an American discovery and I think we can be justly proud of it.

This English book is quite in contrast with that of DeSchweinitz, who, in his 1921 edition, recognized the possible etiologic factors of infected teeth, tonsils, and nasal sinuses in his chapter on keratitis. Vienna did not recognize this factor in corneal lesions in 1929. Guist even quoted Fuchs as saying that his trip to the United States did not convince him that there was so much merit in the idea. In Lindner's clinic no attention was paid to foci of infection in corneal ulcers. In one case of recurring corneal ulcers that they had been treating for six months the second assistant confided to me that they were beginning to think this case might be possibly one of focal infection. I asked if I might examine the patient. Upon being then urged to do so I found that while all the central and lateral incisors were in good condition, every tooth back of the cus-

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pids was rotted down to the gum line. It took them six months before they even considered the possibility of a focal infection, at which time they had not even started on the search.

A few years ago Dr. Don Campbell presented a paper before our local society on Avitaminosis. You who were present will well remember how ably he presented his thesis. Certainly this factor must always be kept in mind in treating corneal lesions.

The cornea, being so exposed to injury and infections from the conjunctiva, is quite naturally more exposed to exogenous than to endogenous infections. Hence we see many more extogenous and traumatic infections of the cornea than endogenous, for which reason I feel the latter has been neglected.

The use of the slit lamp is invaluable in locating beginning corneal lesions and in locating exactly their site in the cornea. With this aid I have followed several cases of keratitis punctata superficialis. The lesions began in the substance of the cornea and at first with no bulging of the corneal epithelium. Later as the lesion progressed I could see the corneal epithelium begin to bulge. An examination of the patient showed definite foci of infection in nearly every case.

Davis of Washington, D. C., describes a form of punctate keratitis in the parenchymatous substance of the cornea which he feels is different from the ordinary punctate variety. In this form there are fine white points in the most superficial layers of the cornea immediately beneath, but not involving the corneal epithelium. These points tend to be angular and take the fluorescein stain very brilliantly. Yet Davis finds no loss in the perfect brilliance or smoothness of the corneal epithelium.

Accompanying these spots are grayish lines which Vogt calls glass lines. The question has been pointedly raised that there must be some epithelial involvement or else there would be no staining with fluorescein. Yet Davis found no epithelial involvement in any of his eleven cases and felt that the staining was due to absorption of the stain. The point I wish to stress, however, is that he felt that practically all his cases were due to foci of infection, chiefly in the teeth or tonsils.

It does not appeal to me as desirable to

give a different name to each case or group of cases of keratitis that may be a little differently located in the cornea. I feel there is a large class of endogenous infections of the cornea. Some may locate in the superficial third of the cornea, others in the middle layers and often the lesions may be scattered throughout all the cornea. The essential feature is that they should be recognized as endogenous in origin.

Keratitis profunda, the causes of which are in the great majority of cases unknown, according to Fuchs, is another class that should be restudied with the focal idea in mind. I have found many of these associated with foci of infection, the removal of which quieted the corneal lesion, and, what is of more importance, put a stop to the recurring attacks.

There is one class that I have met quite frequently. The lesion begins at the margin of the cornea about 2 mm. inside the limbus. It is visible with the slit lamp as an infiltration into the anterior third of the cornea. At first there is no staining with fluorescein and no bulging of the corneal epithelium. The lesions are recurring and as the individual spot increases a bulging of the epithelium is noted. Later an open ulcer forms which responds readily to cautery with 95 per cent phenol. There is usually a series of these spots, which may recur after an interval of a few months to a year or so. There is quite a severe reaction with the onset of the infection. These are not the marginal catarrhal ulcers. They more nearly parallel the types caused by Zur Nedden's bacillus or "the small marginal ulcers often developing in elderly people without any discoverable cause," to quote Fuchs.

My own attempts to isolate the infecting organism have not been successful. Zur Nedden's bacillus seems to be quite frequent in the Rhine country, but "is rarely found elsewhere, possibly due to the difficulty of demonstrating the bacillus" (Fuchs).

The usual report I have had on smears or curetings is pneumococci, staphylococci or streptococci, which are rather unsatisfactory when we consider that there are between one and two hundred strains included in these groups.

A recent report on bullous keratitis is interesting. This condition, according to Fuchs, represents an intermediate stage between inflammation and dystrophy, and

usually occurs in eyes diseased by iridocyclitis or glaucoma. Parsons states that an interepithelial edema probably occurs, usually with increased intraocular pressure. Triscom reports three cases of this condition, in two of which there were no glaucomatous symptoms. These two cases permanently cleared up after evacuation of an infected nasal sinus, which was on the same side as the affected eye. In the third case a similar result occurred, but this patient did have an elevation of tension. No treatment was effective, even cautery or an iridectomy. The eye was cured only when infected ethmoid was treated. (Jr. Ophth., (Jan.) 1936.)

M. F. Weymann, in reporting an article from the French *Archives of Ophthalmology*, indicates that herpes of the cornea may occur in variable forms and as such groups the following: the branched keratitis of Hansen Grut, dendritic keratitis of Emmert, disciform keratitis and ulcerative keratitis in radiating furrows as described by Gillet and even possibly the superficial punctate keratitis of Fuchs. Many authors group these corneal lesions as herpetic eruptions. The typical corneal herpes febrilis are quite similar to those that form on the angles of the mouth or nose. The more common form of herpes is the dendritic ulcer. These are very apt to keep recurring. In nearly all of the recurring type I have been able to demonstrate some focus of infection. When this is removed, I find that there are no further flare-ups.

The relation of these herpetic lesions to diseases of the fifth nerve is interesting. Neurological surgeons have discovered that after operating on the fifth nerve they will frequently get herpetic eruptions around the mouth if the semilunar ganglion has been traumatized.

In nonoperated cases, neurologists now feel that there is an inflammatory lesion in the ganglion and that this lesion is activated from foci of infection occurring in other parts of the body. This seems to me to tie these lesions together in one common bond. It is not merely sufficient to diagnose a herpetic lesion and hence a lesion of the fifth nerve. This in its turn is often the result of some focus of infection, usually around the head.

The following case is characteristic of a group that I find fairly commonly in industrial practice.

Case 1.—Mr. L. was injured by striking his left eye against the needles of a Christmas tree, December 26, 1935. There was a large abrasion of the center of the cornea which stained with fluorescein. There were floating specks in the aqueous and a chemosis of the upper lid. The next day there was more edema of the lid and definite infection of the cornea, which was cauterized with 95 per cent phenol. The eye was apparently clearing up readily but it flared up on January 10. There was an increase of the corneal infection so that the wound was again curetted and carbolyzed. A styte developed in the upper lid. Further examination of the patient showed that he had a devitalized tooth which showed peri-apical infection. There was also a moderate infection of the nasal sinuses which at this time we found had been present for several months. The infected tooth was removed and the sinuses were treated. The eye now began to clear up and soon made a complete recovery. The point I wish to emphasize is that the focal infection had nothing to do with the onset of the corneal lesion. However, the eye did not clear up normally. Then we found there were foci of infection present. They were the factors that kept the eye from undergoing normal resolution. When they were corrected the eye promptly cleared up.

Case 2.—A similar case was Mr. B. who was first seen on November 13, 1935, with a history of the eye being red for three days. An examination showed a typical iritis, confirmed by the slit lamp findings. The serological tests were negative for syphilis and there was a normal blood count except for a slight increase in the white blood cells, i.e. 8,000. He gave a further history that he had been having a lot of arthritis, that he was at the University Hospital some months before when no foci of infection had been found. He had had his tonsils burned out but there was still plenty of tonsillar tissue left so that I marked his tonsils plus 2 septic 3. Tonsillectomy was advised but as his iritis seemed mild we thought it might be advisable to postpone the operation until the eye quieted down. He was given an injection of milk on the 16th, and on the 18th the eye was very much worse, there being barely light perception and the pupil much contracted in spite of atropine powder used, in addition to the adrenalin and atropine. His tonsils were removed on the 19th. On the 21st, two days later the eye was much better so that the pupil dilated leaving a dense white ring of exudate on the center of the lens capsule. Vision was reduced to 4/50 at this time but the eye continued to improve so that on December 2 his vision was 20/50. The arthritis had also greatly improved. On December 4, there was much more pain and injection and the aqueous became quite cloudy again. At this time he admitted having had Neisserian infection a number of years before. He was referred to the urologist, who found pus in his prostate. There was considerable clouding in the vitreous now. The eye again improved promptly when the prostatic infection was brought under control. On December 27, he had normal vision and we could see numerous patches of retino-choroiditis and pigmentation. On January 15, after a little more vigorous prostatic massage, he again had a flare-up of this iritis but it promptly subsided under treatment.

There have been many similar cases. In the first case the infected tooth or the sinuses had nothing to do with the injury, or possibly the beginning ulcer. However, after the tissue had been injured, either toxins or the bacteria themselves from foci of

infection were potent factors in keeping up the infection and retarding recovery. Attention to these factors did more to cure the eye lesions than any local treatment.

In the second case, the iritis responded magically to the removal of the tonsils. The curative response was so prompt that I feel certain that they were the original focus of infection. Then after a quiet period of two weeks there was again a flare-up. As this time appropriate treatment was given an infected prostate with similar but not as prompt relief. Again the eye cleared up. There was another very mild flare-up of iritis following a more vigorous prostatic massage, but this quickly subsided.

This illustrates a group of cases seen fairly often. One focus seems to be the starting point of the infection. When this has been eliminated, other foci which may not have been acting before now seem to take the rôle of activators and to keep up the infection.

Case 3.—Mr. R. had a series of small marginal ulcers of the cornea which, according to Fuchs, often develop in elderly people without discoverable cause. These are very similar to the ulcers I reported in the first of the paper. This man began having his ulcers on January, 1928. Each time he came in we

would find a devitalized tooth, the extraction of which would be followed by a clearing of the eye. Soon the devitalized teeth were all extracted, so that those which remained were all vital. However, the man was 68 years of age and the teeth looked bad and gave very poor electrical reactions for vitality. The ulcers which had been coming in the left eye now started coming in the right eye, but soon shifted back to the left eye. In the last of May, he still had a recurrence of the ulcers and I advised the extraction of all the remaining teeth, since they looked unhealthy and there was some pyorrheic infection.

While he has been in at different times for calca-reous cysts of the lids there have been no ulcer formations since the teeth were extracted.

Conclusion

This case, along with several others, confirms me in my conviction that a large number of these corneal lesions, which in the past have been reported occurring in the aging or without demonstrable cause or are explained on the basis of being herpetic, are really cases of endogenous infections from discoverable foci of infection. The local treatment we pretty thoroughly agree upon. The eradication of the focus of infection, however, in my opinion is of vastly more importance, since this treatment is followed by cessation of future attacks.

SOME OBSERVATIONS ON EPITHELIAL TUMORS OF THE BLADDER

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The Carcinoma Registry of the Urological Association emphasizes the startling fact that considering warnings given to the general practitioner and to the laity the diagnosis and treatment of tumors of the bladder are not as satisfactory as might be expected with the methods at our disposal. One is reminded of the bold statement by the surgeon that he was unable to cure a particular disease because of the tardy diagnosis on the part of the referring physician. We must insist that the findings of the Carcinoma Registry emphatically show that the failure of early diagnosis is to a large extent responsible for the failure in treatment.

Let us briefly enumerate the salient features of this paper:

1. The initial symptom was hematuria in over 90 per cent of the cases.
2. Less than 13 per cent had a diagnosis and 50 per cent had no diagnosis.
3. Seventy-six per cent of the tumors are located in the trigone near the ureter, thus requiring expert treatment.
4. Over one-third of the tumors are multiple. If papilloma are multiple they are apt to be malignant; if single, they may be regarded favorably.
5. The size of the tumor varies from 0.5 cm. to those of the entire bladder. Only a small per cent of the tumors seen are 2 cm. If less than 2 cm. a large percentage may be cured for

five years. If the tumors are between 2 and 5 cm. in size the prognosis is very bad.

6. Metastases are far greater than we thought; it is not 10 per cent but 30 per cent. 40 per cent of the tumors of the vault metastasize to the liver.
7. Forty-five per cent have pyuria; the consideration of renal back pressure and kidney damage is very important.
8. Treatment: (a) 29 per cent of those cured were in Grades I and II. (b) The rate of recurrence is 50 per cent in twelve months in all multiple tumors. Constitutional diathesis accounts for the recurrence. 80 per cent recurred after resection. (c) The operative mortality was 2 per cent in radium, 7 per cent in cystoscopy and 27 per cent in resection. (d) Open

operative methods were 6.2 per cent in comparison with all methods.

One can readily understand why we must go a little further and insist that with the methods at our disposal no new growth of the bladder should escape observation; and, if so, only on the failure of the patient to consult any physician. Of course we are directing this paper toward those physicians who fail to take advantage of the methods that are now thoroughly understood, to those who are assuming a very grave responsibility and frequently expose their patients to serious and perhaps fatal risks, the following of which are the most important:

1. The continual growth of the tumor which may render an operable growth entirely inoperable.
2. Infection of the bladder with all its strain of painful and distressing symptoms.
3. Infection of the upper urinary tract.
4. Damage to or destruction of one kidney by pressure upon the lower end of the ureter.

The above is rather an alarming group of possibilities, and yet we may faithfully say that in many cases early and accurate diagnosis may avoid all of these dangers, and we repeat that the responsibility for early diagnosis remains with the general medical practitioner and consultant.

The study of this problem of bladder tumor by the American Urological Association has shown the shocking number of painless hematurias which still go by undiagnosed.

A simple classification of bladder tumors is as follows:

1. Benign papilloma—which soon becomes malignant.
2. Papillary carcinoma.
3. Primary infiltrating carcinoma.

Statistically bladder tumors comprise about one-tenth of 1 per cent of hospital cases, and nine-tenths of 1 per cent of autopsies, thirty-nine hundredths of 1 per cent of tumor cases and about 3 per cent of urological cases. The ratio is generally quoted at four to one in favor of the males. Eighty per cent of all tumors of the bladder occur between the ages of forty-five and sixty-five. These tumors are prone to metastasize late, to grow by local infiltration and they do not

kill by metastases as often as by local action; that is, the pain of cystitis, the destruction of kidney function, and tumor toxemia. Implantation metastases are not uncommon. The favorite site of these tumors is in the proximity of either ureteral orifice.

Symptoms may be classified as follows:

A—Local

1. Painless hematuria
2. Urinary frequency
3. Pain, either constant or dysuria
4. Difficult urination
5. Retention of urine
6. Passage of tumor fragments
7. Incontinence of urine
8. Mass in bladder region

B—With infection

1. Pyuria
2. Ammoniuria
3. Fever

C—With stone formation

1. Passage of calculi

D—With renal complications and local extension

1. Renal pain
2. Renal mass, as hydronephrosis
3. Uremia

E—Constitutional symptoms

1. Anemia
2. Loss of weight and strength
3. Cachexia

The above list of symptoms can be reduced to certain cardinal and almost constant findings.

Keyes states that in 90 per cent hematuria is the initial symptom in papilloma, and 70 per cent the initial symptom in carcinoma, while in the remainder, the initial symptom was some disturbance of bladder function. Of course the hematuria of bladder tumor must be distinguished from that of the kidney, ureter, prostate, and other diseases of the bladder.

Disturbances in bladder function are in no way characteristic but are in fact highly suggestive of other conditions with which we are all familiar. The following statement: "If there are many clots in the urine and the urine is a bright red in color, the blood is from the bladder. If it contains wormlike casts, it is ureteral, and if it is of dark color its renal." It is against such statements and teachings that the reader is warned. Bright red urine and clots are most common in bladder hemorrhage, but they may also come from kidney and the prostate. Wormlike casts may be ureteral, but they are most common from the kidney hemorrhage. Dark color means that the blood has been in contact with the urine for some time. Perhaps it is true that it may occur in renal bleeding. But it is also commonly

seen in bleeding from the bladder and prostate. For instance, hematuria and pain in the kidney area would make us expect the bleeding to be of renal origin, but we must not forget that tumor of the bladder growing near and obstructing the ureteral orifice causing hydronephrosis and pain by back pressure is not an uncommon symptom-complex. The presence of infection in the urine may further complicate this picture.

When one considers the difficulties in diagnosis, referable to symptoms of bladder function, one becomes more involved in possibilities of error. Tumor of the bladder may simulate stone by producing frequency, intermittent stoppage of the stream and slight hematuria. Another, not uncommon, source of error consists of those which simulate prostatic enlargement, since symptoms of obstruction may be the most prominent: frequency, inability to empty the bladder completely, pain and cystitis. Residual urine may be present, even though rectal examination does not show an enlargement of the prostate. If the surface epithelium over a large hypertrophy of the prostate becomes ulcerated, we may have a terminal hematuria, perhaps intermittent in type, which is practically indistinguishable from bladder tumor.

Briefly restated there are a few cardinal points which should be remembered pertaining to diagnosis of bladder tumors:

1. The tumor may exist for a long time without causing any symptoms.

2. Hematuria, which is the initial symptom in three-fourths of all cases and practically always present in some stage of the disease, is, in many cases, by no means the early symptom. For instance, profuse hemorrhage may occur even to fatal termination from very small growths. The profuse bright terminal intermittent hematuria is usually the picture of non-malignant growths or those which have not quite reached the malignant stage. It is often stated that the hemorrhage from malignant growths is less profuse, more persistent and most often accompanied by pain. Needless to say, the hematuria may be of long or short duration and it is practically always followed by infection, as cystitis, pyelitis and obstruction.

3. It is not uncommon to find the surface of these new growths encrusted with lime salts. As often happens, small bits of

these crusts break off and are passed, suggesting renal and vesical stones.

Methods of Diagnosis

1. *History*.—We have adequately dealt with this above.

2. *Examination*

- (a) Rectal.

- (b) Vaginal.

In cases of small tumors this procedure will reveal nothing. If the growth is infiltrating the bladder wall with stiffening and thickening, the prognosis may be hopeless. One may, however, rule out massive vesical calculus by this means. Rectal examination affords most service in differentiating diseases of the prostate from those of the bladder and of course this is unreliable except in the hands of the expert.

3. *Cystography*.—Much valuable aid may be obtained by use of cystograms. Enough information is sometimes secured from the filling defects of the bladder outline to make definite clinical diagnosis.

4. *Cystoscopy*.—Let me repeat that the precise and accurate diagnosis depends upon the cystoscope. It is rare, indeed, for one skilled in its use not to make a correct diagnosis by this means. If the bleeding is from the urethra or prostate the mere passage of the scope may often stop it. We can easily decide whether bleeding is coming from one or the other ureter. In only very exceptional cases is the cystoscopy valueless and that is in cases of copious hemorrhage and massive tumor growth. I do not, however, wish to leave the impression that the cystoscope and its use will be of value to the general practitioner or the general surgeon; it is like all instruments, requiring experience and delicacy of manipulation afforded only to those almost in daily use of it and thus it will be valuable in the hands of the expert. One may readily understand the feeling of one urologist especially, who threw out from his record his first fifty cases of bladder tumor because examinations were too inaccurate to be of value. This appears to be quite radical but it should serve as warning to those who regard themselves as experts after having examined a few cases. If I have left the feeling that a cystoscope in the hands of a urologist is always resultant in an accurate diagnosis I wish to dispel it, because not infrequently we must defer our

opinion until a second examination, and rarely we fall into the same pitfalls which confront the beginner. Our greatest source of error can be attributed to calculi, calculus cystitis and calcareous deposits over the new growths. Our last patient required a long period of treatment before we were able to convince ourselves of tumor. Keyes reports that more than one expert has seen a pedunculated growth with a fairly long pedicle, which had become encrusted with lime salts, giving a clicking sound to the cystoscope, and has later observed with deep chagrin a tumor of the bladder. At times we are unable to cystoscope these patients because they are too shaky, and we like to feel that we have exhausted all possible means before we subject our patients to the gentle maneuvers of cystoscopy.

5. *Biopsy and pathologic diagnosis.*

H. McClure Young says:

"The microscopic findings are not by any means conclusive. It often happens that the cystoscopic appearance of the tumor will give us just as good an idea as to its nature as the pathologist.

"Even when the histologic structure is beyond question, it still does not tell us with any degree of certainty what the clinical course of the disease is likely to be.

"The histologic examination must come after the cystoscopy has told us all we need to know."

Treatment of Bladder Tumors

Just a few words to mention what we have to offer the patient. Hugh Cabot cleverly remarks, "We shall now discuss the subject which for some extraordinary reason the patient is peculiarly interested in, that is, the subject of therapeutics."

The treatment of tumors of the bladder depends upon the following:

1. The size of the tumor.
2. The location.
3. Its shape and consistency, whether pedunculated or sessile, hard or soft.
4. The condition of the surrounding mucous membrane, whether of normal appearance up to the base of the tumor or infiltrated or inflamed.
5. The condition of the bladder as a whole, that is, whether inflamed or normal.
6. Whether the tumor is single or multiple.

We have tried to give a simplified consideration of the factors that control the treatment of bladder tumors. The actual work is highly technical and varies to such an extent with the individual case that lengthy discussion will not be attempted. Suffice it that we have tried each and every method that has ever been employed.

As a method of routine we follow fulguration or resection of the tumor through the cystoscope. In the early cases two thorough fulgurations are generally sufficient to destroy the entire growth. Failure to influence the growth with above procedure obviously calls for more radical attack; with open operation, with actual cautery or desiccation with the Davis Bovee unit.

It is of special interest that radium in our hands has proved of little value, but x-ray under the guidance of a good therapist minimizes recurrences.

A large percentage of our favorable results has followed fulguration done in the office with but little discomfort to the patient. These are of course the single type growths diagnosed early and in which we should expect our highest percentage of cures.

We have painted a very depressing and almost deplorable picture of a serious urological problem. We must, however, not be too disheartened, because there are evidences of gradual development which cast a ray of hope for the future. In contrasting a series of three and five year cures, twenty years ago, with those of the Carcinoma Registry of today, we find a perceptible increase that is very encouraging.

Today's results are still far from what we might wish, and also, I believe, far from what we may actually accomplish. With certain physiologic and pathologic factors more favorable than in tumors elsewhere, we should face the problem of treatment with new confidence and expect a steady improvement in the final results in this type of case.

TRICHOPHYTIDS IN RELATION TO ECZEMA*

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During the past few years, a great deal of interest has developed in regard to the subject of trichophytin sensitivity. The allergist has long been aware of the important rôle of fungi in allergic conditions of the respiratory tract. The conception that skin hypersensitivity to fungi exists, also, is now widely accepted. This development was initiated abroad by Block¹ and Jadassohn.⁴ Later Sulzberger and Wise,⁸ and subsequently others^{5,6,7,9} in this country reported the occurrence of trichophytin hypersensitivity in dermatophytosis. Since then numerous reports have further confirmed this viewpoint and have emphasized the importance of the dermal manifestations of fungus hypersensitivity. The word "trichophytids" has been used to describe the skin manifestations of trichophytin hypersensitivity.

In this report we would like to bring to your attention the results of our use of fungus extracts for the diagnosis and treatment of trichophytin hypersensitivity, particularly occurring in chronic eczema.

The materials available for both skin testing for fungi and treatment were of two types; the first one used was an American extract of oidiomycin and trichophytin. Subsequently, we also used a Brazilian² trichophytin, said to contain over 300 strains of fungi. Tests were done intradermally with these extracts in suspected cases. A positive reaction to the fungus extract appears in twenty-four to forty-eight hours, as an area of redness and induration, resembling a positive tuberculin reaction. Occasionally an immediate wheal-like reaction occurred. We have considered the immediate wheal-like response as an atypical reaction but of probable diagnostic importance. It is possible, however, that it may be due to one of the by-products of the fungus culture or the culture media used, rather than a specific fungus hypersensitivity. However, these immediate reactions were usually confirmed by the appearance of the typical tuberculin type reaction.

In infantile eczema no definite positive reactions were obtained by us. Hill³, however, has reported some positive fungus reactors in some of his cases of infantile eczema. These were all of the dry scaly type and reacted chiefly to monilia (oidiomycin). He found no positive reactions in

the weeping (atopic) type of infantile eczema.

It is in the group of chronic eczema of older children and adults that we have obtained many positive reactions. This type of eczema (chronic atopic neurodermatitis), familiar to all of us, is characterized by a dry, scaly pruritic inflammation and induration of the flexor surfaces of the knees and elbows. Some of these cases develop similar lesions on the back of the neck and trunk. Complete intradermal tests have been made routinely in these cases. In many cases prior to testing for fungi only partial relief was obtained, by elimination of factors giving positive skin tests. Later, when routine tests for fungi were made and frequent positive reactions were found, treatment of these patients, in an attempt to decrease their hypersensitivity to fungi in conjunction with the elimination of other specific allergens, resulted in considerably better results, and in a few, complete cures. We have used both the American and Brazilian products for desensitization. The American extract containing both monilia and trichophytin, is injected intradermally for treatment, usually two or three times a week. As the delayed tuberculin type of reaction diminishes under treatment, the amount injected is increased by giving more injections and using stronger extracts. The average case was given from twenty to forty treatments, or from one to eight intradermal injections at each treatment. The Brazilian trichophytin is a heated vaccine, supposedly denatured so that severe local reactions do not occur even in the strongly hypersensitive. This preparation is given subcutaneously two or three times a week in gradually increasing doses. The full course, as supplied by the manufacturer, consists of ten injections in graduated doses. We have

*Read before the Section on Dermatology, Michigan State Medical Society, 116th Annual Meeting, Detroit, September 23, 1936.

found that considerably more injections are usually needed. The response to treatment with these extracts has been about equally good with both types, or perhaps a little better with the Brazilian extract. An important point to mention here is that, once clinical cure has occurred, treatment should not be stopped. In a number of cases of apparent cure, the condition has recurred after a few weeks or months. One should look upon desensitization with fungus extracts as similar to desensitization with pollen extracts or other antigens. The average case of pollen hay fever may obtain permanent relief only after a number of years of continuous perennial treatment. In the cases of respiratory allergy, being desensitized to house dust or foods, it is necessary to continue with a maintenance dose of the specific extract at intervals of three or four weeks for a year or more to prevent relapses. There is no reason to believe that a short course of trichophytin desensitization will produce a permanent effect in most cases. For this reason we have recently continued these patients on maintenance doses at three or four week intervals, with many fewer relapses. In most of these cases subsequent retesting has shown definite diminution in skin hypersensitivity. A few case histories will illustrate more effectively the value of trichophytin desensitization.

Case 1.—Miss A, aged twenty-one, had eczema as an infant. In later childhood she developed the typical flexor surface type of lesions on knees and elbows. As she grew older, her face, arms and legs, and almost her entire trunk were involved. The skin was dry, thickly indurated, scaly, and very itchy. Complete testing revealed positive tests to silk and wheat, which could be proved to be involved clinically. Even walking into the silk department of a store would produce a severe relapse. The eating of wheat was equally harmful. On a complete wheat-free diet, and complete isolation from silk, the improvement was only about 50 per cent. She was then tested for fungi, and positive tests obtained. Desensitization was then begun for fungi and later for silk and wheat. The improvement after one year was almost 100 per cent with no relapses on inhalation of silk, but moderate itchiness of the skin occurred when silk was worn next to the body. Wheat at the end of the year could be eaten in moderate amounts without relapses.

Without attention to the fungus situation in this case, the result would have been quite unsatisfactory. It is not difficult to understand the likelihood of trichophytin infection and sensitization in eczema of long standing. The broken skin exposed for a long time to the ubiquitous fungus, is apparently frequently sensitized. However, in not many of these cases can a definite focus be demonstrated.

It is the above type of eczema, in which multiple factors, such as inhalants, foods,

contactants, and fungus hypersensitivity are found, that excellent results can be obtained by complete allergic study, including trichophytin tests.

Case 2.—Another case of interest because of its atypical and easily misleading symptoms, occurred in a boy of twelve, who was seen through the courtesy of Dr. C. L. Douglas. The patient had been subject to a severe pruritic vesicular dermatitis of the arms and legs for five consecutive years. It began each year at varying times from February to May, and usually persisted for six to twelve weeks. With each attack he developed a typical allergic nose, very much like an acute hay fever. His skin condition had been considered by a number of dermatologists as a form of fungus infection, but there was very little response to many types of local treatment. Because of the seasonal recurrence, and typical allergic nose, a tree pollen allergy of the nasal mucous membranes and skin was suspected. All tree pollen tests were negative, using concentrated extracts intradermally. The tests for trichophytin, both American and Brazilian, were strongly positive. After two treatments with the Brazilian extract, he was almost completely cleared up with a simultaneous cure of his nasal condition. After the full course of ten injections the skin tests showed very marked reduction in trichophytin sensitivity. This boy had apparently both skin and nasal mucous membrane hypersensitivity to trichophytin.

Brief mention can be made of the other "ids" which have been studied. Most of these cases presented deep seated pruritic vesicular lesions of the hands and fingers, resembling pompholyx. In many of these cases we were able to demonstrate the focus of infection. These vesicular lesions are more atypical and more obviously "ids" than the previously mentioned chronic eczema. The results in these cases have been somewhat better with the Brazilian extract than with the American product. With both types of treatment, however, it is important to continue maintenance doses at wide intervals to maintain hyposensitization.

We have treated about forty cases with trichophytin extracts, with 40 per cent good results. It is much too soon to quote definite statistics since most of these patients have been under observation for only about a year.

In closing, the importance of coöperation between the allergist and dermatologist cannot be overemphasized. It is possible that a number of the failures that we have encountered, may have been due to faulty diagnosis and treatment; however, it would seem that the percentage of good results has been increased by such coöperation. The situation is analogous to the close coöperation which, for best results, should exist between the rhinologist and allergist in

treating chronic nasal allergy, and the internist and allergist, in the care of asthma.

References

1. Bloch, Br.: Allgemeine und Experimentelle Biologie der durch Hyphomyceten erzeugte Dermatomykosen. J. Jadassohn's Handbuch, Vol. XI, Berlin: Julius Springer, 1928.
2. Da Fonseca and de Area Leao: Vaccinothérapie das Epidermophyceas e das Tinha Tonsurantes. Revista med.-cir. do Brazil, 39:8, 1931.
3. Hill, L. W.: Sensitivity to fungi in infantile eczema. Jour. A. M. A., 103:1430, 1934.
4. Jadassohn, W.: Immunbiologie der Haut, J. Jadassohn's Handbuch, Vol. II, Berlin: Julius Springer, 1932.
5. Kerr, Pascher and Sulzberger: Monilia and trichophyton extracts. Their combined use in eczematous ringworm. Jour. Allergy, 5:288, 1934.
6. Krueger, A. P., and Templeton, H. J.: Preparation of trichophytin. Arch. Dermat. & Syph., 30:9, 1934.
7. Pennington, Edna S.: Trichophytin and monilia extracts in allergic dermatoses. Jour. Allergy, 7:54, 1935.
8. Sulzberger, Marion B., and Wise, F.: Ringworm and trichophytin. Jour. A. M. A., 99:1759, 1932.
9. Van Dyke, Kingsbury, Throne, and Myers: The use of trichophytin as a diagnostic and therapeutic agent. New York State Jour. Med., 31:611, 1931.

PRURITUS

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The subject of pruritus or itching is by no means a new one. It is, however, one of the most important dermatological symptoms and a discussion of the nature, pathogenesis, and treatment of pruritus should be of considerable value in crystallizing our knowledge of this important subject. Pruritus has the same status in dermatology as pain in general medicine. The patient is driven to the dermatologist because of itching just as he is driven to his family physician because of pain. Pruritus, however, is not necessarily a sign that there is something wrong in the skin, for the cause may be in some other organ of the body. The cause of the pruritus may be very easy to diagnose, or it may require the most careful examination. Pruritus may be mild and transitory, or it may be so severe as to make the patient most uncomfortable. It may be associated with a definite dermatosis, or it may be merely a subjective symptom without any associated skin lesions, except those produced by scratching.

The nature of pruritus is rather difficult to define. It is a sensation of the skin, which induces the desire to scratch. No separate sensory nerve endings have been identified as special sense organs that transfer the sensation of itching to the higher centers, similar to the nerve endings that perceive touch, heat, cold, and pain. It is believed, however, that the nerve endings which perceive pain also conduct the sensation of itching, so that itching is a sub-pain sensation.

It is believed that edema of the skin as in urticaria or in inflammation of the skin produces the itching sensation. Some authorities claim that a histamine-like substance is produced in the skin which is responsible for the sensation. The nerve endings for pruritus are situated in the epidermis and not in the corium, for when the epidermis is denuded the sensation of itching can no longer be experienced.

All our conceptions regarding the nature of pruritus are still in the theoretical stage.

From a histopathological standpoint there are no changes in the skin that are definitely associated with pruritus. Suffice it that itching is the result of certain stimuli on nerve endings situated in the epidermis.

The psychic factor is of great importance in the production and interpretation of itching. The sensation can be brought on by a mere thought, or by the mention of skin parasites such as scabies or pediculi, or by watching another person scratch. Individual susceptibility determines one's reaction to a prurigenic stimulus. Thus a stimulus that will produce itching in one person might not affect another.

The sensation of itching is not necessarily pathological, for a certain amount of it is considered physiological. There is hardly a person who does not experience occasionally a sensation of itching either on the nose or scalp or some other part of the body. It is only when the sensation becomes marked or when it is associated with a dermatosis that it becomes abnormal.

Pruritus may occur in the following groups of dermatoses:

1. *Parasitic Infections*.—Fungi: (1) trichophyton, (2) epidermophyton, (3) monilia: The allergic manifestations of fungous infections are usually localized on the hands, but they may be generalized all over the body. They are usually associated with a considerable amount of itching. They are respectively referred to as trichophytids, epidermophytids, and monilids.

Pediculi: capitis, corporis, and pubis.

Scabies; Insect bites such as mosquitoes, fleas and bed bugs.

Pyogenic infections such as impetigo, ecthyma, and pyodermas may also be included in this group.

2. *Eczema—dermatitis venenata group.*—In this group are included the industrial dermatoses, and all forms of contact dermatitis.

3. *Toxic erythema group.*—In this group are included all the dermatoses in which a circulating toxin acts on the dermal tissue, producing various inflammatory phenomena. The source of this circulating toxin may be a focus of infection, a drug or a food to which the patient is sensitive. In this group are included such dermatoses as erythema multiforme, urticaria, toxic erythema, drug rashes, and serum sickness. Dermatitis herpetiformis may also be included in this group.

4. *Eczema—asthma—prurigo group.*—In this group are included atopic or allergic eczema and neurodermatitis or, as it is often referred to, pruritus with lichenification. The distribution in atopic eczema is quite characteristic, involving as a rule the face, neck, and flexural surfaces of the elbows and knees.

5. *Pruritus associated with certain papulo-squamous eruptions.*—Lichen planus, pityriasis rosea, psoriasis, seborrheic dermatitis.

6. *Pruritus in connection with certain constitutional diseases.*—Diabetes, jaundice, kidney disease, arteriosclerosis, endocrine disturbances.

7. *Degenerative and atrophic changes in skin producing pruritus.*—Senile pruritus, pruritus hiemalis or winter itch, bath pruritus.

8. *Lymphoblastoma group in association with pruritus.*—Leukemia, Hodgkin's disease, mycosis fungoides, lymphosarcoma.

9. *Psychogenic and neurogenic pruritus.*—Associated with emotional states or under nervous strain. Acarophobia—where a patient imagines that he has a parasitic disease.

That the skin is an organ of expression is exemplified by blushing or paling of the skin under the influence of emotional stimuli. Similarly certain emotional states may be associated with or followed by itching. It is believed that mental and physical fatigue lower the threshold of skin sensitivity and as a result the sensation of itching may be more easily produced.

There is a definite relationship between the state of the nervous system and the sensitivity of the skin. Hyperexcitability of the nervous system results in nervous exhaustion and fatigue and this leads to neurasthenia and psychasthenia, in which conditions neurogenic or psychogenic pruritus is an important symptom. Anxiety neuroses, sexual neuroses, and other disturbed mental states may be associated with pruritus. One, however, should try to find an organic cause for a case of pruritus, and if unable to do so may accept the cause as of psychogenic or neurogenic origin.

A discussion of pruritus would not be complete without mentioning the special forms known as pruritus ani, pruritus vulvæ, and pruritus scroti. These terms merely

refer to pruritus in a definite anatomical location, but they are so common, and at times so rebellious to treatment, that they deserve special consideration.

It is quite possible that the nerve endings that convey the sensation of itching are more sensitive and concentrated in these areas, and individuals who are living under nervous tension or are high-strung are very susceptible to these special forms of pruritus. The business executive is more likely to develop pruritus ani than the day laborer. The nervous and hysterical woman is more likely to develop pruritus vulvæ than the calm easygoing person. This refers only to the psychogenic and neurogenic forms of pruritus in these areas. We may also get itching in these areas as a result of other factors. For example, fungi may cause pruritus in the anal and genital regions. In diabetes, pruritus in these areas may be the first symptom. In a large percentage of cases, however, no definite organic cause can be found for the pruritus ani or vulvæ, and they are as a result grouped as of psychogenic origin.

The treatment of pruritus resolves itself into causal and symptomatic. Where the cause can be discovered its removal, if possible, is the first logical step in proper treatment. Where the cause cannot be ascertained or cannot be completely removed a great deal can be accomplished for the relief of the patient by symptomatic measures alone.

Under causal therapy the following procedures may be mentioned. In the parasitic group the use of antiparasitics is indicated. The use of sulphur ointments in scabies and Whitfield's ointment in ringworm infections are examples of dealing with the cause of the pruritus.

In the dermatitis venenata group the identification of the offending irritant by patch tests and its removal are of prime importance. Of course, the irritation that has already developed has to be treated symptomatically.

In the toxic erythema group the removal of foci of infection, or the recognition of an offending drug or food to which the patient is sensitive, will remove the cause of the pruritus.

In the neurodermatitis group allergy and heredity play an important part, and the patient may also have other allergic phenomena such as hay fever, asthma, migraine,

and gastro-intestinal disturbances. Food allergy may be the basis of this form of dermatosis, and scratch or intradermal tests may be of value in ascertaining the causative food element. By its elimination or by a process of specific desensitization this form of pruritus may be relieved.

Where pruritus is associated with specific dermatoses such as lichen planus or pityriasis rosea, we naturally have to treat the respective dermatoses. Since we do not know the exact cause of these dermatoses, the treatment is really symptomatic rather than causal.

Where pruritus is associated with constitutional diseases the treatment of the underlying constitutional disease is the specific form of therapy. Thus in diabetes the use of insulin and proper diet will relieve the pruritus. In jaundice the cause of the jaundice has to be removed, while in arteriosclerosis medical treatment of the patient is of prime importance. In pruritus associated with endocrine disturbances as during the menopause the use of theelin has been found of value. This form of therapy has been particularly useful in pruritus vulvæ.

In senile pruritus and pruritus hiemalis where the skin is unusually dry and sensitive, the proper oiling of the skin with mineral oil or olive oil will be of great value.

In the lymphoblastoma group deep x-ray therapy of enlarged lymph glands and the spleen will remove the underlying pathology and thus relieve the pruritus.

In the psychogenic and neurogenic forms of pruritus treatment of the underlying nervous irritability by proper social adjustments, by bromides and phenobarbital, or even by suggestion and hypnosis will aid in relieving the pruritus. These are examples of treatment directed to the cause of pruritus, which are of great value in many conditions. However, where the removal of the cause cannot be accomplished, or where its removal does not give complete relief, various local or systemic measures have to be employed to give the patient relief from his suffering. These are considered under symptomatic treatment.

A form of symptomatic therapy which is aimed not directly at the pruritus, but affects metabolism in some way and thus relieves the pruritus, is referred to as shock therapy; or it may be called indirect symptomatic therapy. Under this heading are

included injections of proteins, or milk, or various milk preparations. Calcium therapy, injections of sodium thiosulphate and intravenous administration of concentrated glucose solutions are included in this form of therapy. Autohemotherapy can also be considered as a form of shock therapy and has been found beneficial in some cases of generalized pruritus.

In some cases of pruritus there is a disturbance in the equilibrium of the autonomic nervous system and an associated vagotonia. In these cases the use of ephedrin, adrenalin, or atropin is of value. The latter drugs will cause immediate relief of an urticaria and its associated pruritus.

Among the direct forms of symptomatic treatment of itching the most important consists of local protective measures. Where there is a definite dermatitis it resolves itself in the treatment of the acute dermatitis by wet dressings of Burrow's solution, calamine lotion, calamine liniment, and in less acute forms by the use of ointments, pastes, and creams. In children scratching has to be prevented by mechanical means if necessary.

The various forms of medicated baths are of great value in generalized pruritus. Among the remedies commonly added to the bath are oatmeal, bran, corn starch, baking soda and tar.

There are certain drugs that have a local anesthetic effect on the nerve endings of the skin, and thus relieve itching. In this category we can place phenol in concentrations of 1 to 2 per cent, camphor and the tar derivatives. The value of x-rays in the treatment of pruritus is supposed to be due to a soothing effect on the nerve endings of the skin. Superficial x-ray therapy is one of the best methods of relieving pruritus. Its action, however, is purely palliative but by breaking the vicious circle and relieving the desire to scratch, it may lead to the cure of the pruritus. In recurrent and chronic pruritus it has to be used with caution, because the skin can only tolerate a certain maximum number of treatments to any given area. Generalized suberythema doses of ultra-violet are also supposed to have a soothing effect on the nerve endings and thus relieve itching in generalized forms of pruritus.

Certain drugs act on the higher centers of the central nervous system and thus relieve

itching. We have already mentioned bromides and phenobarbital in neurogenic types of pruritus. Strontium bromide intravenously is recommended for the relief of pruritus, especially where it is associated with arteriosclerosis. Acetylsalicylic acid and amidopyrine may also be included in this group. Morphine should not be used for the relief of itching as it tends to produce pruritus instead of relieving it.

Certain procedures will replace itching by another sensation. The use of heat and cold belong to this group. Menthol, which produces a sensation of cold, is a very common antipruritic and also belongs to this group.

Scratching by the patient is an attempt to replace the sensation of itching by the less unpleasant sensation of pain. It might be referred to as an almost instinctive response to itching but due to its damage to the skin it should be discouraged and prevented.

The treatment of pruritus can best be accomplished by a combination of several procedures, rather than by any single form of

therapy. First, the cause should be removed where possible, and then, by a combination of various local and systemic procedures, the pruritus may be effectively relieved.

In this discussion we considered the nature, cause, and treatment of pruritus. When a patient presents himself with pruritus he may have a simple condition such as scabies or he may have a grave constitutional disturbance such as diabetes, leukemia, or Hodgkin's disease. It is therefore the duty of the physician to take a complete history, analyze the patient's mental state, and then to carefully examine his patient and carry out the necessary laboratory tests in order to make a proper diagnosis. Once the diagnosis has been made treatment can then be applied in a logical manner.

References

1. Becker, S. W.: Diseases of the Skin. National Medical Book Co., 1935.
2. Klauder, J. V.: Pruritus: considerations on its pathogenesis. *Pennsylvania Med. Jour.*, 37:729, (June) 1934.
3. Sulzberger, Marion B., and Wolf, Jack: Pruritus and its treatment. *Med. Clin. North America*, 19:971, (Nov.) 1935.

Local Medication of Upper Respiratory Tract

Clyde A. Heatly, Rochester, N. Y. (*Journal A. M. A.*, Dec. 5, 1936), declares that the use of local medications by the general practitioner in the treatment of diseases of the upper respiratory tract should be restricted for the most part to acute infections. It is to be emphasized that attempts to treat chronic disorders by such measures are fraught with serious danger until the diagnosis of the underlying pathologic condition has been thoroughly established. This as a rule requires examination by a specialist in this field. All too frequently cases are encountered in which local medications have been carried out over long periods before a serious underlying infection or new growth has been discovered. The resulting loss of time commonly leads to serious or even fatal consequences. In the early stages of acute pharyngitis the local application of silver nitrate (from 5 to 20 per cent), mild protein silver (10 or 20 per cent) or Mandl's solution often gives relief. Vigorous swabbing, however, should be avoided. Gargles, so frequently prescribed, are often useless, especially in children, because the contraction of the tongue and pharyngeal muscles prevents the solution from reaching the inflamed parts. They may, however, be used in the form of salt and soda, one-half teaspoonful each in a glass of warm water, or Dobell's solution, 2 tablespoonfuls in a glass of warm water. In the more severe infections the use of hot salt and soda irrigations will be more effective. Lozenges containing small quantities of menthol, camphor, guaiac and codeine, orthoform tablets or calcidin-anesthetin troches lessen the discomfort in mild cases. In acute tonsillitis the most effective local treatment consists in irrigation of the throat every two hours with a warm solution containing 1 teaspoonful of sodium chloride and sodium bicarbonate in 1 pint of water. Warm dextrose solution (50 per cent) made with "corn syrup" 1 part and water 2 parts is also effective. When irrigations are not pos-

sible nor well tolerated a similar warm solution of salt and soda, potassium permanganate (1:5,000 solution) or acetylsalicylic acid (five tablets crushed in a glass of water) may be used as a gargle. The practice of frequent and vigorous swabbing is decidedly not recommended. In the common acute infectious disease fusospirochetal angina silver nitrate (from 10 to 20 per cent, tincture of iodine, chromic acid (5 per cent), copper sulfate (10 per cent), gentian violet, methylene blue, acriflavine base and mercurochrome have all been used successfully. The therapeutic indications in acute laryngitis require the control of inflammation, the release of spasm and the relief of obstructive dyspnea. Steam inhalations to which compound tincture of benzoin (1 teaspoonful to a pint of water) is added constitute the most helpful local treatment. Menthol (0.65 gm.) may be similarly employed. These may be given directly at three hour intervals and a steam kettle should be kept going constantly in the room. Few ear conditions are suitable for treatment by the general practitioner. In acute external otitis (boils) the external auditory canal may be gently cleaned with alcohol and then packed lightly with a narrow gauze wick soaked with aluminum acetate (saturated solution), ichthammol in glycerin (10 per cent) or mercurin (prescriptions E, F and G). Heat should be applied as constantly as possible and gives great relief. Vaccines may be of value in recurrent cases. Fungus infections (otomycosis) are best controlled by daily instillations of a 2 per cent solution of salicylic acid in alcohol (70 per cent) together with the administration of potassium iodide by mouth. Infections caused by bacillus pyocyanus respond to acetic acid (2 per cent solution). When earache is due to an acute catarrhal inflammation of the tympanic membrane, warm drops of phenol in glycerin (from 5 to 10 per cent solution) repeated if necessary at three hour intervals for two or three doses often give relief.

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"Every man owes some of his time to the up-building of the profession to which he belongs."

—THEODORE ROOSEVELT.

EDITORIAL

POSTGRADUATE MEDICAL EDUCATION

Elsewhere in this number of the JOURNAL appears an article by Dr. James D. Bruce, director of the department of postgraduate medicine of the University of Michigan. The article is an evaluation of the efforts towards adequate postgraduate medical instruction.

Considering the advances that medicine has made during the last quarter of a century, postgraduate study is a necessity. Medicine is the most dynamic of the learned professions. Advancing the educational standards required to begin the study of medicine has had the effect of being selective, with the result that many entering upon the course in medicine are imbued with the scientific spirit of it and devote themselves to it with commendable zeal. The more

progressive men in medicine have felt the need of postgraduate work even half a century ago, when it was the custom to seek educational advantages in old world medical centers. Following this period, an attempt was made in the way of proprietary graduate schools to fill the need at home. These, for various reasons, did not prove entirely satisfactory. They did not go into the basic scientific side of medicine, but rather emphasized the clinical features.

Dr. Bruce traces the evolution of postgraduate medical education from the efforts of organized medicine through the American Medical Association to promote it. The county society program first tried out in Bowling Green, Kentucky, consisting of discussions in anatomy, physiology, bacteriology, pathology and treatment, was adopted by the American Medical Association for county societies throughout the United States. This was in 1907. About this time, two Michigan county societies adopted this program. As many as 350 county societies throughout the United States fell into line, but eventually interest in the matter of postgraduate work along these lines declined.

In the year 1893, the University of Michigan inaugurated a policy of admitting practicing physicians to one or more of the undergraduate courses. In 1899, the Detroit College of Medicine and Surgery inaugurated Clinic Week, when the entire day from Monday to Friday was devoted to clinical lectures and demonstrations by local men, with a mid-day program of two hours by some distinguished outsider. This program continued to be popular until 1917, when it was succeeded by the one-day clinic.

Early in 1919, the Michigan State Medical Society inaugurated postgraduate conferences in various councillor districts. These occupied only one or two days. In January, 1926, the Michigan State Medical Society appealed to the University of Michigan and the Detroit College of Medicine and Surgery to consider a means of meeting the rapidly growing demands for postgraduate instruction. A year later, a committee of three, representing the state medical society and the two educational institutions, met and brought in a report following a period of study of postgraduate problems. An appeal was made to the medical department of the University of Michigan for the establishment of postgraduate opportunities

in medicine. The Board of Regents approved the recommendations of the committee and authorized a new department in the Medical School, the Department of Postgraduate Medicine, to be established during the session of 1927-28, with Dr. Bruce as director. At the annual meeting in 1928, the council of the Michigan State Medical Society endorsed the program.

The first teaching program consisted of four- to six-week courses for general practitioners. After a year or so, however, these courses were abandoned. A number of reasons are given, chief of which is that many doctors found it inconvenient to leave their work for this length of time. This has been superseded by several new courses of varying lengths of time, each devoted to review as well as to the presentation of new information. Dr. Bruce comments at length on the nature of the more recent plans.

The principles upon which this program has been evolved are sound and the coöperation of medical schools, hospitals and teaching physicians has been admirable. It is no longer a matter of discussing the advisability of postgraduate medical instruction. The future appears to involve questions of extension of educational opportunities and the development of policies best suited for a progressive profession in a changing society.

BASIC SCIENCE BOARDS

In view of Michigan's experience, it may be interesting to note the states which have Basic Science Laws. They are as follows, with the year of enactment: Arizona, 1933, Arkansas, 1929, Connecticut, 1925, Nebraska, 1927, Oregon, 1933, Washington, 1927, Wisconsin, 1925. During the present legislative sessions, Basic Science legislation has been introduced into the following states: Colorado, Georgia, Kansas, Maine, Michigan, New Mexico, Oklahoma, Tennessee, Utah, West Virginia and Wyoming. At this writing, we are not able to give any information as to the actual enactment of the Basic Science Laws in these states.

To repeat, however, the Basic Science Law is one of the most forward movements towards the improvement of the quality of medical care in states in which basic science laws have been adopted that have yet been devised. Everything is to be said in their

favor with no logical argument against their enactment.

States failing to adopt basic science legislation will become a refuge for the incompetents who cannot qualify in the states progressive enough to raise their standards by enacting such restrictive laws.

PHYSICIANS AND DESIRABLE LOCATIONS

A member of the Michigan State Medical Society writes suggesting that the society take on a new function, namely, that of introducing eligible physicians to desirable locations. There are many localities in the state without doctors as well as doctors who for lack of such knowledge locate in congested areas. In other words, the cities appear to be over-supplied with physicians while many of the smaller communities are, so to speak, going begging.

This fact, of course, has been apparent for a long time. It constitutes one of the major problems of the distribution of medical care. The solution is not so simple as it would have been a quarter of a century ago, when a larger proportion of medical students came from the farm. Today the majority of medical students are urbanized products, born and reared and educated in the city. Accustomed to city life, the country has not the appeal that it had to the medical graduate twenty-five years ago. Not only this, his training has been more scientific than that of the physician a generation ago. He is helpless without the diagnostic aids that only the larger towns and cities can provide. Medicine of today is more of a science and less an art.

Our correspondent's idea, however, is worthy of thoughtful consideration. It might be made to work without any special committee. Throughout the state, if each member of the medical profession would report to the executive office at Lansing desirable locations not supplied with adequate medical service, the executive office would doubtless be willing to pass the information on to physicians seeking a location.

A Vanished Custom—Tourist at Six Gun, Arizona: "Do they still hang horse thieves out here in the wild and woolly West?"

Native: "No, there ain't no more."

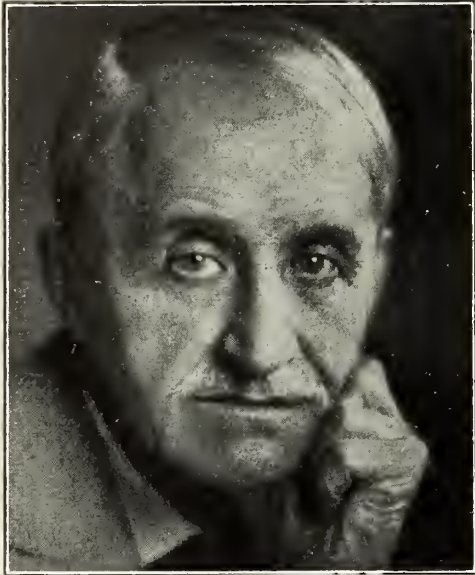
Tourist: "Ain't no more what?"

Native: "Hosses."—Anon.

THE HORSE AND BUGGY DAYS

Dr. Rush McNair of Kalamazoo has contributed to *The Kalamazoo Gazette* some interesting sketches of Kalamazoo medicine of fifty years ago. The editor of the *Gazette*, to whom we are grateful, has kindly furnished us with these articles with permission to make liberal abstracts.

However, feeling that the author himself is worthy of space in this JOURNAL, we have written him for a brief sketch of his life. Dr. McNair, in his modesty, declares the "annals of the poor" to be "short and simple." He has disappointed us by sending us a sketch of himself that was altogether too brief. Dr. McNair himself has practiced in Kalamazoo for more than half a century.



DR. RUSH MCNAIR
Kalamazoo

"Whatever claims one can make on their ancestors to place themselves in the sun, I wish to plead to the utmost," writes Dr. McNair.

"My father, of Scotch-Irish ancestry, graduated at Rush Medical College in 1859. At his graduation, his dissections had been so beautifully done that he was invited to remain in the college as prosector in anatomy, but he felt it his duty to stay amongst his friends and relatives and wear himself out, toiling over the Illinois bottomless roads of early spring and pushing his way through snowdrifts in a horse-drawn, open sleigh in winter.

"I will tell you three things he did. (1) He used tannic acid in the treatment of burns seventy-five years before Paul de Kruif discovered Doctor Davidson or Doctor Davidson discovered tannic acid. (2) Having been called far into the country several times, usually at night, to stop an alarming nose bleed of a poor man, and operating half in the dark, it occurred to him to set old Dan up in a chair and bleed him till he was a bit faint. The moment the blood started to flow from his arm it stopped dripping from his nose. Thereafter, whenever old Dan felt himself getting dizzy and saw flashes before his eyes, he would come to town and be bled. (3) My father, at great expense, taking the contention before the Supreme Court of Illinois, won a decree

that makes it safe for a medical society to take testimony and print the same in cases of moral turpitude of members of medical societies.

"My mother, who had taught school, and who had a memory that never failed her, calm and cool in any emergency, often accompanied my father in critical situations.

"My twin brother and I were born July 1, 1860. My brother died in his thirteenth year. I received the degree of A.B. in 1885 and M.D. in 1887 from the Northwestern University and have practiced in Kalamazoo since. I have been a member of the United States Pensioning Board and of the Selective Draft Service, World War. I am a member of the Kalamazoo Academy of Medicine, Michigan State Medical Society, and the American Medical Association.

"I am attempting to write of the practice of medicine and of the doctors in Kalamazoo beginning in 1887. I confess I am throwing my heart into this endeavor. I wish to bring back to the world, again, if it be for only a day, those noble, devoted doctors.

"In so doing I place myself under the test of the legal formula which has distressed so many doctors: *Res Ipsa Loquitur*."

Dr. Rush McNair, who began his medical practice at Kalamazoo in April, 1887, is celebrating his fiftieth anniversary in active practice by writing his reminiscences concerning those medical men who were in practice in Kalamazoo County a half century ago.

The doctor's articles, which comprise an invaluable contribution to the medical history of the county, have also attracted widespread interest as mentioned in the columns of *The Kalamazoo Gazette*.

Dr. McNair plans to return to Northwestern University in June for the fiftieth reunion of his class. He was graduated as valedictorian. Of the forty-four who graduated in Dr. McNair's class, eight are now living. Dr. McNair is the only survivor among the Kalamazoo physicians who were in practice in 1887.

Upon this fiftieth anniversary Dr. McNair has received the plaudits and the acclaim of the community in which he lives. Greetings have come also from medical men and other friends of this Kalamazoo physician from every part of the country. At its April meeting, the Kalamazoo Academy of Medicine honored Dr. McNair, its only fifty-year member, as guest of honor at the banquet table. The Academy invited the Kalamazoo Bar Association to join in the dinner and seated at the speakers' table with Dr. McNair was Attorney Albert Frost of Kalamazoo, who is completing fifty years of legal practice in that city.

The Kalamazoo Gazette has found that Dr. McNair's reminiscences have attracted greater interest than most feature articles. Every reader who has been a resident of the community for any length of time is finding in this series a point of keen personal interest. In daily practice the doctor comes into close and intimate association with the families of his clients and these reminiscences are causing old friends in many homes to live again.

At the beginning of his reminiscences, Dr. McNair stated that "this essay is neither biography nor history . . . it is reminiscence."

"It has been in many ways a pleasure to live over again the days of half a century ago," Dr. McNair writes. "To me, the sole survivor of that time, has fallen the privilege of bringing before you the doctors of 1887, that I may display to you a unique and precious rosary. I count each bead unto the end . . . to each a cross is hung . . . and from the years, I hear the tolling of a bell."

So exhaustively has Dr. McNair prepared his articles concerning doctors of earlier years, that he

has continued his search for material until he has found photographs of each, which serve to illustrate his reminiscences.

Upon coming to Kalamazoo a half century ago and meeting the Kalamazoo doctors, Dr. McNair was profoundly impressed. They were educated, largely experienced and had a high opinion of the necessity and dignity of their profession.

"Each doctor had his own characteristics, accentuated by his almost solitary companionship with himself," Dr. McNair continued. "In the long horse-drawn rides by day and night he thought out and set in order his own theories of disease and chose his remedies. He was inclined to be suspicious of other doctors and watchful of them. In an earlier day there had been cases of malpractice against several of the doctors, which led to uneasiness amongst them."

Dr. McNair set out to make his courtesy calls upon the established doctors. Dr. Jerome M. Snook gave him a critical going-over. His black prominent eye bored holes into the very gizzard of the young physician.

"Dr. Snook concluded that I was hardly in the physical condition to practice medicine and said that I should take a dog, gun and tent and camp out for a while," Dr. McNair recalled. "I replied that my financial condition would not permit of such a benefit and that, as a matter of fact, if I went into the wilderness, I would prefer 'a book of verse, a jug of wine and thou.' The doctor smiled and said 'That would be a good way, too.'"

"I next called on Dr. William T. Stillwell. He was tall and gaunt. His forehead wide and high; his hair, thinning. His face was bewhiskered and pale. There was a hectic flush in both cheeks and his overbright eyes made me note how he tried to control a cough. 'What is the newest remedy for dropsy?' Dr. Stillwell asked, and then he added, 'Is there anything better than the squirting cucumber?' Then I recalled that Clutterbuck, an English house, was making a tablet of the squirting cucumber and calling it Elaterium. Later I called back. The hectic was brighter; his eyes were like glow lights in the dark. He sat in a pillowed chair, his finger on his pulse, a thermometer under his tongue and a spit cup on the desk beside him.

"Others may be diverted from contemplation of the inevitable, but the doctor himself is undeceived. It only remains for him to prepare to live the grandest of his hours . . . his last. He may, in a way, practice self-hypnotism, as such efforts can induce a certain euthanasia. He will appear untroubled and unvexed. He will accept kind care and expressions of love without excess or humility of thanks. He will be most thoughtful for the feelings of others. His greatest regret . . . that dear ones are suffering with him. Kindly and sweetly, he closes his eyes. He is submerged in a vast and endless beatitude."

Passing in review throughout Dr. McNair's reminiscences have been those distinguished medical men of a half century ago. In extended reviews each Sunday have appeared such men as the following:

Dr. Harris Burnet Osborne, who took his first course at the University of Michigan; who volunteered as a private in an Illinois regiment in the Civil War, later rose to the rank of post surgeon of the garrison of Vicksburg, Miss., after its capture. He was an uncle of Dr. McNair and a student under McNair's father, Dr. Samuel McNair.

Dr. Foster Pratt, who as a member of the Michigan Legislature won an appropriation to build the first hospital for the insane in Michigan. Dr. C. B. Burr, author of "Medical History of Michigan," states that Dr. Pratt's ex-augural address before the

Michigan State Medical Society in 1878 so impressed him that he turned to the study of psychiatry. This same history has forty-four references to Dr. Pratt.

Dr. William B. Southard and Dr. Orlo B. Ranney, devoted and loyal to their professional duties, yet indulged their love of nature. Both spent a part of nearly every day on the good earth, with its grains and vineyards and apiaries, where they rested their nerves and each lived well up into their eighties.

Dr. Herman H. Schaberg, Netherlands born, was the great medicine man of the community's great Holland citizenship.

Dr. Irwin Simpson, Irish born, handsome, erratic and loyal, forgot himself in his professional devotion and, like Dr. Schaberg, passed out of the picture under 60 years of age.

Reviewed also have been Doctors Albert B. Cornell, Joseph Sill, Joel Partridge and James Stewart Ayres. Yet to come in the series are such medical men as Doctors Homer O. Hitchcock, Ira W. Fiske, William Mottram, John W. Bosman, Cornelius VanZwaluwenberg, Oliver A. LaCrone, George E. King, Charles H. McKain, Adolph Hochstein, Stephen D. O'Brien, Uriah Upjohn and his medical sons and daughter, and many others.

It was Dr. Hitchcock who at the request of Gov. John Bagley organized the Michigan State Health Department in 1873 and who served as the head of this department for the next four years.

Although Dr. McNair is dean of Kalamazoo medicine in length of practice in that city, Kalamazoo's oldest doctor in years is Dr. Edward Ames, still practicing at eighty-six. Dr. Ames was the first Kalamazoo doctor to drive an automobile. His original car was a Knox, delivered August 1, 1902. "It was a lever drive, air-cooled, equilateral, right-angled parallelogram."

In discussing the "horse and buggy" days, Dr. McNair recalled that fifteen of his own fifty years were during that era. One article was devoted entirely to this period with a tribute to the horses which saw the doctors through.

"It is below zero on a dark and stormy night and the snow is falling fast," said Dr. McNair. "Dress in all the warm clothes you have. Light your lantern . . . no electric buttons. A shovel is at the back door and with it the deep snow can be shoveled away from the barn door.

"Upon entering the barn, the horse may be heard lurching to his feet with a groan. To put the frozen bits into the horse's mouth is an act of cruelty. One can ease his conscience on this point by noisily blowing his more or less hot breath upon the bits. It is more decent that the bits be immersed in warm water. The horse will appreciate this. By the time the horse is hitched to the cutter and outdoors, it occurs to the doctor that he is shivering. He tucks the blankets around him and says 'Giddap!' And, as the little girl said: 'Now, good-by God, I'm going into the country.'"

Dr. McNair was driving "Fritz," the horse which took offense during a circus parade when a bull elephant came too near, gave a squeal, jumped and bit the elephant.

Nor did Dr. McNair forget the "bicycle days" of medical practice:

"On a very hot night, dressed only in a sleeveless short shirt, pants and slippers, and turning homeward from far out North Park street, I heard a bicycle bell tinkle behind me. It was Dr. Cornelius VanZwaluwenberg attired in a nightshirt, pants and slippers. As he passed me, his shirt tail was waving behind him. I took after him, only wanting to clutch the hem of that garment . . . but Van put on a burst of speed and disappeared like a ghost in the dark."



DOES YOUR CORRESPONDENCE MAKE YOU MONEY AND FRIENDS?

HENRY C. BLACK and ALLISON E. SKAGGS

ALTHOUGH every doctor carries on more or less correspondence in the course of his professional work, probably few have given much thought to the effectiveness of the letters written. Ordinary skill in letter writing demands more than anything else the "human touch," or putting yourself in the place of the person receiving the letter, so that your message will gain the desired results with the same sincerity and directness you would use were you talking to the man in person.

Impressions

Letters over your signature to firms you are dealing with, patients, friends, and other doctors are, in a manner of speaking, your messengers and carry very definite impressions of you. Style and quality of stationery, and neatness of appearance, as well as the tone of the letter reflect your attention to detail and your personality just as truly as do your personal contacts, and too much care cannot be given to this phase of your business. Many times in the press of professional duties correspondence is neglected and opportunities for cementing friendships as well as making money are passed up.

Referred Cases

For instance, you know how much you appreciate it when a doctor to whom you have referred a patient, promptly drops you a line thanking you and telling you what his diagnosis is, and his plans for treatment. Not only is this the courtesy you have reason to expect, but it is also the best possible insurance that you will refer more cases when possible. Neglect of this same thoughtfulness when patients are referred to you ruins more possibilities of referred work than you can imagine, and on the other hand an established routine of always doing this will make you many friends among the profession. Your office nurse can make it a routine to bring to your at-

tention every such case, and the time involved usually need not be long.

Courtesy Letters

Don't you suppose one of your patients who sends a friend in to your office would be pleasantly surprised to receive a note thanking him, and assuring him you will do everything you can to justify his recommendation? And is it not likely that he will seek an opportunity to do it again more surely than if you had apparently ignored his effort? Certainly! And the few minutes you spent thanking him will pay big dividends.

Collection Letters

Similarly, collections need not be a "bug-bear" if you take time to talk the situation over by letter with the "slow" patient. Try to place yourself in the patient's position and write to him just as courteously as you would talk to him about the matter. You know there is some misunderstanding if he has not responded after two or three statements. One of three things is probably wrong: First, the patient thinks something was wrong with the service, in which case a prompt contact is important; second, payment is difficult, and a gradual but steady liquidation should be arranged; or third, and most probable, he is just dilatory, and a courteous reminder is necessary to get his attention. In any case a personal letter offers the best possibility of amicable adjustment. But remember this, get the *patient's point of view* and approach the problem from his angle as well as yours. If you can impress the patient with your interest in helping him to take care of the obligation your results are assured. "Soft pedal" the obvious interest you have in improving your own collections. For instance, here is a typical example of a bad approach:

Dear Mr. Jones:

As I have some heavy obligations to meet this month I will appreciate your taking care of this account.

Sincerely,

Dr. Blank.

(Continued on page 417)

President's Page

WE THANK YOU!

THE Michigan Basic Science Bill is now law!

High points in the progress of this public health and educational measure were its introduction into the House of Representatives on March 4 by Representative Carl F. DeLano of Kalamazoo and Representative Chester B. Fitzgerald of Detroit, the House Public Health Committee hearing of April 13, followed by consideration and passage of the bill by the House on April 27; referral on April 28 to the Senate Judiciary Committee, on motion of Senator D. Hale Brake of Stanton, the Senate committee hearing of May 12, and passage of the bill by the Senate on May 13; concurrence in the Senate amendments by the House on May 17, and the signing of the enrolled act by Governor Frank Murphy on May 27, 1937.

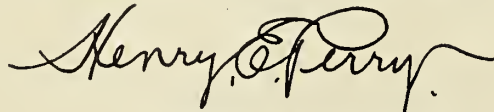
Passage of the Basic Science Bill, designed to better health standards and safeguards in Michigan, testifies to one sterling fact: that the Governor and the members of the Michigan Legislature are attempting sincerely to make Michigan a better place in which to live. Their action, made in the face of strong opposition and constant pressure, will bring unlimited benefits to the people whom they serve.

In the case of the Basic Science Bill, every legislator was subjected severely to strong lobbies seeking to destroy or make ineffectual this good piece of legislation. Intimidation and threats of reprisal were and are the lot of the Senators and Representatives who courageously voted for this proposal which they knew was right and impartial. To use the vernacular, every legislator who voted for House Bill No. 261 "stuck out his neck a long way." He voted for basic science in spite of warnings that he was signing his "political death-warrant!"

Thanks for this measure, which is another good law on the statute books of Michigan, must go therefore to the Governor and to the members of the Legislature. In order to be fully appreciated, thanks must be three-fold: first, by word of mouth, through sincere and prompt expression; second, by tangible reciprocity, through patronage of your legislator-friend in his capacity as a professional or business man; third, by vote, through reelection to office of good public servants. If "man is a political animal," as Aristotle says, then let us physicians as a guardians of health make the best of our many daily and innumerable yearly contacts; let us help to keep in office those who have proved themselves to be friends of the people; let us reelection them just as long as they are willing to sacrifice their time and talents for the good of our state.

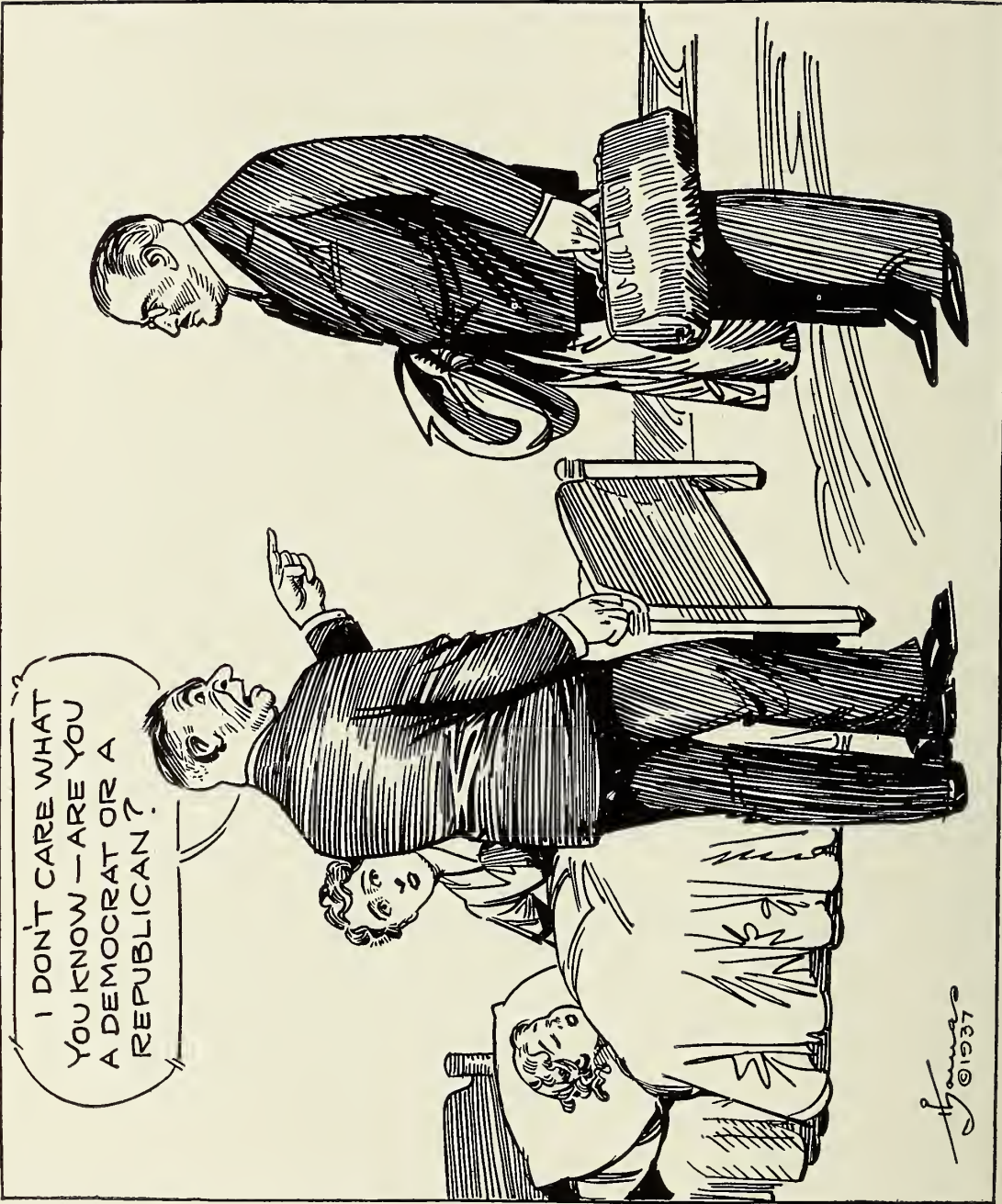
The Michigan State Medical Society appreciates and is grateful to the Michigan Legislature and to the Governor for their enactment into law of the Basic Science Bill. The Society will do its utmost to transmit this appreciation and sense of gratitude to every physician in the state of Michigan, with the hope that these thanks will be tangibly expressed in the future.

Again, your Excellency, and Honorable Members of the Legislature, we thank you!



President of the Michigan
State Medical Society

If the Family Doctor Were Chosen As We Choose Our Public Officials



—Thomas in the Detroit News of April 3, 1937

DEPARTMENT OF SOCIETY ACTIVITY

L. FERNALD FOSTER, M.D., Secretary

HEALTH LEADERS

With the many changes in our social order of recent years we are witnessing an unusual number of health activities of every description. Strange as it may seem, many of these activities have been initiated by lay groups. Some of these groups have undoubtedly been motivated by altruism, some by zealotry to do something, some by personal gain and some occasionally by political ambitions.

It would seem as though all health projects should be initiated or at least guided by the medical profession, either as individuals or by the various units of organized medicine. Too often the medical profession concerns itself with some of these health movements only after they have become well established with lay leadership and may lay the foundation for a broadening of the principles of socialized medicine.

The physician in his conservatism too often refuses to recognize the initiation of new health endeavors and thereby relinquishes his potential leadership without adequate guidance and direction and therein lies many of the problems to which the medical profession must eventually give heed.

After all, who is better qualified than the physician to control any health endeavor? His training and experience over years have been concerned almost entirely with health matters. He alone has the necessary viewpoint from which to direct such matters to the benefit of the public health and for the continuance of the traditions of medicine.

During recent months we have experienced unusual activities in the fields of Cancer, Tuberculosis, Mental Hygiene, Maternal and Infant Welfare, Venereal Diseases and in all forms of Preventive Medicine. We have also seen the establishment of county and city health units with their ramifications of activity.

No one of these endeavors can adequately be carried on without the advice and guidance of the medical profession.

Our plea, therefore, is not for active obstruction of the inevitable health measures, but for leadership and guidance. It is the responsibility of the individual physician, the county medical society and the state medical society to be cognizant of every health movement. It is each one's responsibility to accept any proffered leadership and to assume all other direction of any movement that concerns first the public health and secondly the established practice of medicine.

YOUR FRIENDS

The medical profession can probably point to more groups as their friends than most professions. This is due partly to their widespread contacts and partly to the intimate, personal service the physician is called upon to render.

At this time of the year we desire to direct your attention to one particular group of friends, our Technical Exhibitors at our Annual meeting. While this group may be somewhat actuated by business interests, the fact remains that they make a real contribution to our Annual State Medical meeting. The Michigan State Medical Society can boast this year of one of the finest technical exhibits in the country, an exhibit that will bring to you the latest in medical appliances and commodities pertinent to the efficient and successful practice of scientific medicine.

It is only fitting that we should show our appreciation to these commercial institutions—not necessarily by placing large orders—but at least by visiting their booths and registering our presence in the usual signature manner.

The physical set-up of the Annual Session is so arranged that you must pass by each exhibit booth. Your time is so arranged that you will have ample time to stop at each booth at some time during the sessions. Remember to do this and thereby encourage these friends who deserve your support. They are supporting *your state society*.

Remember your friends.

BASIC SCIENCE BECOMES LAW IN MICHIGAN

Most Controversial Proposal before Legislature is Accorded
Overwhelming Majorities by Both Houses.

THE Basic Science Bill (House Bill No. 261) passed the Michigan House of Representatives April 27, 1937, by a vote of 73 to 21, after a heated debate during which the following friends of the medical profession ably defended the bill against a score of emasculating amendments: Representatives De Lano, Fitzgerald, Jos. C. Murphy, Hamilton, Buckley, Brown, Mrs. Belen, C. P. Adams, Kappler, Diehl, Gartner, Eaton.

The House Vote

Representatives voting for House Bill No. 261 were:

Adams, C. P.	Harma	Priehs
Adams, C. J.	Hatch	Rawson
Allard	Herrick	Root
Belen (Mrs.)	Kaminski	Royce
Berka	Kappler	Smith, J. B.
Brown	Kessel	Snow
Buckley	Knox	Stanley
Buza	Kronk	Steele
Calvert	Lee	Stockfish
Clancy	Lepczyk	Stout
Courter	MacKay	Sundstrom
Decker	Magnotta	Swain
DeLano	Martin, D. M.	Thomson
Diehl	Martin, J. F.	Tibbits
Dignan	Miles	Tomlin
Douville	Morley	Walsh
Eaton	Mullen	Ward
Espie	Murphy, F.	Warner
Faulkner	Murphy, J. C.	Watson
Feenstra	Murphy, N.	Weideman
Fitzgerald	Myers	Weza
Gartner	Nagel, E. G.	Williams
Glass	Nagel, J. F.	Speaker
Hamilton	Nugent	
Hampton	Post, J. I.	

Yeas: 73

Those who voted *against* House Bill No. 261 were:

Aldrich	Legg	Rowell
Clines	Murphy, J. B.	Schneider
Dombrowski	Nixon	Scriber
Hailwood	Odell	Schwinger
Helme	Post, M. E.	Scott
Jarvis	Priest	Smith, T. L.
Kircher	Rahoi	Teachout

Nays: 21

Present but *not voting* were: Messrs. Barrett, Faircloth, Gallagher and Wheeler.

* * *

The Senate Vote

The Basic Science Bill passed the Michigan Senate on May 13, 1937, by a vote of 28 to 1, after another stormy session, during

which the following friends of the medical profession ably defended the Bill against a number of bad amendments and an attempt to refer the Bill to a committee where it would have died: Senators D. Hale Brake, of Stanton; Earnest C. Brooks, of Holland; James A. Burns, of Detroit; Joseph V. Coumans, of Bay City; Miller Dunkel, of Three Rivers; Edward W. Fehling, of St. Johns; and Earl W. Munshaw, of Grand Rapids.

The Senate Vote

Senators voting for House Bill No. 261 were:

Bishop, Otto W.	Flynn, Felix H. H.
Bradley, Wm. M.	Jones, Carroll B.
Brake, D. Hale	Lamoreaux, J. Neal
Brooks, Earnest C.	McCallum, George P.
Burhans, Earl L.	Matthews, Christian F.
Burke, Tom	Munshaw, Earl W.
Burns, James A.	Palmer, William
Callaghan, Miles M.	Pangborn, Samuel H.
Coumans, Joseph V.	Porter, Elmer R.
Crawford, Mark L.	Roosevelt, Jos. C.
Diggs, Charles C.	Shea, Henry F.
Dotsch, James D.	Town, C. Jay
Dunkel, Miller	Weadock, Geo. W., II
Fehling, Edward W.	Wickstrom, John C.

Yeas: 28

Only Senator James A. Murphy, Detroit, voted *against* the bill.

Senators Hittle and Vander Werp were present but *did not vote*.

* * *

Governor Murphy Signs Bill

On May 17 the Bill was re-referred to the House of Representatives, which concurred in the Senate amendments (including the subject of "pathology") by a vote of 59 to 13.

The Basic Science Bill was thereafter printed and enrolled, and presented to Governor Frank Murphy, who signed it on May 27, 1937.

The law as adopted is a fair, impartial and workable measure.

The Basic Science Bill was the most controversial proposal before your Legislature this year. The opposition used severe pressure and every influence to force a negative vote. *It took courage to vote "yes" on House Bill No. 261.* Your State Senators and Representatives who voted in favor of the Basic Science Bill proved themselves to be friends of the medical profession and of

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all who desire better health standards and safeguards in Michigan.

* * *

Thank You

The Basic Science battle is over. It has been a hard struggle, ending in a wonderful victory. Your MSMS Legislative Committee wishes to thank all the family physicians, all the chairmen and members of county so-

ciety legislative and policy committees, and every physician who so willingly accepted responsibility and gave his support in this fight.

Success has resulted from the unified effort of many key-men in many counties. Without this hard work from all parts of the state, not by one but by many workers, we would have lost. The State Society's officers and Legislative Committee are very grateful to you all.

THE BASIC SCIENCE LAW STATE OF MICHIGAN 59TH LEGISLATURE REGULAR SESSION OF 1937

Bill Introduced by
Messrs. DeLano and Fitzgerald

Bill No. 261
House Enrolled Act No. 42

AN ACT to regulate the practice of healing in the state of Michigan; to provide for examinations in basic sciences as a prerequisite to eligibility to practice the art of healing in this state; to provide for the appointment of a board of examiners in the basic sciences, and to prescribe its powers and duties; to provide for the punishment of offenders against this act; and to repeal all acts and parts of acts inconsistent with the provisions of this act.

The People of the State of Michigan enact:

Section 1. It is the intent and purpose of this act to protect the welfare and health of the people of this state, and to this end to require the passage of uniform examinations in the basic sciences, as herein defined, as a condition of eligibility to practice the art of healing in this state.

Sec. 2. The governor shall appoint a board of examiners in the basic sciences, by and with the advice and consent of the senate, to consist of five members. The first appointments shall be made within sixty days after this act shall take effect, two members to be appointed for terms of two years each, two members for terms of four years each, and one member for a term of six years, and until the appointment and qualification of their successors. Upon the expiration of such terms, successors shall be appointed for terms of six years each, and until the appointment and qualification of their successors. Vacancies shall be filled in the same manner as original appointment, for the unexpired term. Each member shall qualify by taking and filing with the secretary of state the constitutional oath of office. No member of the board shall be a doctor of medicine, chiropractor or doctor of osteopathy. One member shall be appointed for his fitness to examine in each of the following subjects: anatomy, physiology, bacteriology, pathology, hygiene and public health, and chemistry. Members of the board shall be full time professors, or associate or assistant professors, who are teaching the subjects of the basic sciences in any university or college in this state. Not more than one member of the board shall come from any one university or college. The Michigan association of osteopathic physicians and surgeons, incorporated, the Michigan state chiropractic society, and the Michigan state medical society shall each submit to the governor two names, one of whom shall be appointed to the above board from each group, in the first instance, and vacancies shall be filled in the same manner as the original appointment.

Sec. 3. The members of said board shall within thirty days after their appointment meet and elect a president and a vice president from their own number, and elect or appoint a secretary-treasurer who need not be one of their number, but each of whom shall hold their respective offices for two years and until their successors are elected and qualified. Any member of the board and the secretary-treasurer shall have power to administer oaths. The secretary-treasurer shall give to the treasurer of the state of Michigan a bond in the penal sum of five thousand dollars, with sufficient sureties to be approved by the state treasurer, for the faithful discharge of his duties. A majority of the board shall constitute a quorum for the transaction of business. The board shall keep a record of its proceedings and register of all applicants for certificates which register shall show whether the applicant was rejected or a certificate granted. The books and register of the board shall be prima facie evidence of all matters recorded therein. The board shall have a common seal and shall formulate rules and regulations to carry out the provisions of this act. The board shall meet at such times and places as shall be designated by the board and shall conduct at least two examinations in the basic sciences each year. The board shall conduct examinations at such times and places as it deems best, having due

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regard to the times and places of the examinations held by the several examining boards authorized to issue licenses to practice any of the branches of the healing art.

Sec. 4. The board may determine the compensation of the secretary-treasurer and of such other assistants as may be necessary to carry out the provisions of this act. The members of the board shall serve without compensation, but shall be entitled to receive actual and necessary traveling and other expenses incurred in the discharge of their duties. The board is authorized to incur such expenses as may be necessary to carry out the provisions of this act. The secretary-treasurer and other assistants shall receive actual and necessary traveling and other expenses incurred in the discharge of their duties. The expenditures of the board shall not exceed the estimated revenue to be derived from the fees prescribed by this act.

Sec. 5. Any person desiring to practice healing in this state shall make application to the board of examiners in the basic sciences for a certificate of eligibility to take the examinations therein, such application to be accompanied by a fee of ten dollars, and the said board shall issue such certificate upon the following conditions, viz.:

Each applicant shall show to the satisfaction of the board that he is of good moral character, and possesses a high school education or its equivalent; and in addition, pass an examination before the board and to its satisfaction in the following subjects: anatomy, physiology, pathology, bacteriology, hygiene and public health, and chemistry, with a grade of not less than seventy-five per cent in each subject: *Provided*, That the board may, in its discretion, waive the examination herein required when proof satisfactory to the board is submitted, showing (1) that the applicant has passed in another state of the United States an examination in the basic sciences; (2) that the requirements of that state at the time of such examination are not less than those required by this act for the issuance of a certificate; (3) that like exemption from examination in the basic sciences is granted by such state to holders of certificates of eligibility issued under the provisions of this act; and (4) that the application for such certificate is accompanied by a fee of twenty-five dollars: *Provided*, This act shall not apply to any person matriculated in any medical, osteopathic or chiropractic school or college on or before October fifteen, nineteen hundred thirty-seven. The fee for endorsement of a certificate issued under this act to another state shall be five dollars.

A certificate of eligibility issued under this act shall be signed by the president and secretary-treasurer of the board, and shall be sealed with the seal of the board.

If the applicant shall fail in one subject only, he may be examined in such subject at the next ensuing examination without payment of an additional fee: *Provided*, That he shall file an application with the board in accordance with the rules of the board. If the applicant shall fail in two or more subjects, he shall file an application for examination in all subjects and shall show proof satisfactory to the board of additional study in the basic sciences; and such application shall be accompanied by a fee of fifteen dollars. No person shall be eligible to more than three examinations within a period of three years.

Sec. 6. No examining board for any branch or system of healing shall admit to its examinations, or license, or register, any applicant to such board, unless such applicant shall first present to said board a certificate of eligibility in the basic sciences issued under the provisions of this act.

Sec. 7. The board may revoke any certificate of eligibility granted upon mistake of material fact or by reason of fraudulent misrepresentation of fact by any applicant, or when the holder shall be convicted under section eight of this act.

Sec. 8. If any person shall unlawfully obtain or procure a certificate of eligibility under the provisions of this act, whether by false and untrue statements contained in his application to the board, or other fraud or misrepresentation, or if any person shall forge, counterfeit or alter any certificate of eligibility issued under the provisions of this act, or if any person shall practice healing without securing the certificate required under this act, he shall be guilty of a felony, and shall be subject to the penalties prescribed therefor by law.

Sec. 9. The terms "practice of healing," "art of healing," "healing art," "healing" as used in this act shall be construed to mean and include any system, treatment, operation, diagnosis, prescription, or practice for the ascertainment, cure, relief, palliation, adjustment, or correction of any human disease, ailment, deformity, injury, or unhealthy or abnormal physical or mental condition: *Provided*, That this act shall not be construed as applying to the practice of dentistry, dental hygiene, pharmacy, nursing, optometry, chiropody, barbering, cosmetology and hydrotherapy by persons licensed to practice by the licensing board of their respective profession or calling to practice within the limits of their respective professions or callings; or interfere with or prevent the giving of massages, baths, Swedish movements and exercises and physical culture treatments by persons not licensed under this act; nor to persons who confine their ministrations to the sick and afflicted to prayer and without the use of material remedies; nor to persons specifically permitted by law to practice without licenses, who practice each within the limits of the privilege thus granted to them; nor to the fitting and recommending of arch supports and orthopedic shoes by retail dealers.

SOCIETY ACTIVITY

The term "basic science" as used in this act shall be construed to mean and include anatomy, physiology, bacteriology, pathology, hygiene and public health, and chemistry.

Sec. 10. All moneys received by the board of examiners in the basic sciences shall be paid promptly into the state treasury and shall be credited to the general fund of the state to be disbursed as appropriated by the legislature, and a receipt for the same shall be filed by the secretary-treasurer of the said board in the office of the auditor general. The expenses of the board shall be met from the appropriation made therefor by the legislature.

Sec. 11. This act shall not apply to any person legally registered and licensed to practice healing on the effective date of this act.

Sec. 12. The certificate of eligibility required under the provisions of this act shall be construed as an additional qualification of applicants for examination, or license, or registration, in any of the branches of the healing art, and as a condition precedent thereto. It shall not be construed to in any way be a substitute for or in lieu of any of the requirements prescribed by law or by any examining board in any of the branches of the healing art.

Sec. 13. The board of examiners in the basic sciences shall in no manner discriminate against any system or branch of healing. No applicant shall be required to disclose the professional school he may have attended or what system of the healing art he intends to pursue. The examination papers shall not disclose the name of any applicant, but shall be identified by numbers to be assigned by the secretary-treasurer of the board. All examination papers shall be filed with the secretary of state at Lansing for a period of five years.

Sec. 14. Should any provision or section of this act be held to be invalid for any reason, such holding shall not be construed as affecting the validity of any remaining portion of such section or of this act, it being the legislative intent that this act shall stand, notwithstanding the invalidity of any such provision or section.

Sec. 15. All acts and parts of acts only insofar as inconsistent with the provisions of this act are hereby repealed.

T. THOMAS THATCHER

Clerk of the House of Representatives.

FRED I. CHASE

Secretary of the Senate

Approved

FRANK MURPHY
Governor

THE PHYSICIAN—SCIENTIST AND ECONOMIST

Should the modern physician be concerned only with scientific medicine or should he be actively engaged also in the politics and economics of medicine? Is it possible for a physician to be active in the business of organized medicine and still be a scientific practitioner? These are questions which we hear raised frequently.

In the minds of some of our colleagues the idea exists that our so-called "medical politicians" are not scientific physicians. These distorted views have apparently arisen from the failure of their possessors to have analyzed the personnel of the men active in medical politics and economics.

The practice of medicine today must be two-fold: scientific and economic. If all physicians devoted their energies only to the science of medicine and continued to delegate the "business" of organized medicine to laymen, the need for the science of medi-

cine would soon disappear. Complete socialization would be inevitable and with it the deteriorating effect upon its scientific development.

Since the questions have arisen, it is interesting to analyze our State Society as to its committee and official personnel. Whose names appear among our "medical politicians"? Are they inferior practitioners? Are they men of inferior scientific achievement? It is not necessary to list these leaders in our medical organization. They are often men of national reputation, practitioners and specialists to whom the scientific medical world points with pride.

Our advice to the 4,000 physicians of the Michigan State Medical Society is to emulate your "medical politicians"—both in their scientific achievements and their contributions to your medical organization in its political and economic aspects.

Your energies should be devoted to both phases of modern medicine if it is to progress.

MINUTES OF THE MEETING OF THE LEGISLATIVE COMMITTEE

March 30, 1937

1. *Roll Call*.—The meeting was called to order by Dr. L. G. Christian, Chairman, in the Olds Hotel, Lansing, at 6:30 p. m. Those present were Dr. Christian, Lansing; Dr. Henry Cook, Flint; Dr. P. R. Urmston, Bay City; Dr. J. W. Hawkins, Detroit; Dr. P. A. Riley, Jackson; Dr. Wm. E. E. Tyson, Detroit; and Dr. J. B. Bradley, Eaton Rapids. Also present were Dr. Henry E. Perry, President of the MSMS, Newberry; Dr. L. Fernald Foster, Bay City; and Executive Secretary Wm. J. Burns. Absent: Dr. Wm. A. Hyland, Grand Rapids; Dr. Leo Bartemeier, Detroit.

2. *Minutes*.—The minutes of the meeting of February 28, 1937, were read and approved.

3. *Basic Science*.—This subject was discussed, and the activities to date were outlined by the Chairman.

4. *Relief and Welfare*.—Report was given on amendments to Senate Bill 111.

5. *Occupational Disease, Legislation*.—This was discussed, and Senate Bill 106 was outlined to the Committee. The appointment of the Medical Board will be checked by the Executive Secretary.

6. *Legislative Bulletin*.—A letter from the Legislative Committee to the membership of the MSMS was discussed, corrected, and ordered sent to all members at once.

7. *Adjournment*.—The meeting was adjourned at 11:00 p. m.

MINUTES OF MEETING OF THE LEGISLATIVE COMMITTEE

May 6, 1937

1. *Roll Call*.—The meeting was called to order in the Olds Hotel, Lansing, at 8:15 p. m., by Dr. L. G. Christian, the Chairman. Those present were Dr. Christian of Lansing; Dr. J. B. Bradley, Eaton Rapids; Dr. L. H. Bartemeier, Detroit; Dr. Philip A. Riley of Jackson; Dr. P. R. Urmston of Bay City; President Henry E. Perry, Newberry; Secretary L. Fernald Foster of Bay City; Wayne County Medical Society, President Dr. T. K. Gruber of Eloise; and Executive Secretary Wm. J. Burns. Absent were: Dr. Wm. A. Hyland of Grand Rapids; Dr. Henry Cook, Flint; Dr. J. W. Hawkins, Detroit; and Dr. Wm. E. E. Tyson, Detroit.

2. *Minutes*.—The minutes of the Legislative Committee meeting of March 30 were read and approved.

3. *Basic Science Bill*.—Chairman Christian outlined the amendments placed on the Bill by the House of Representatives, reported that it is now in the Committee on Judiciary in the Senate, and explained that a committee hearing would be held on House Bill No. 261 on May 12.

4. *Other legislation* discussed included Senate Bill No. 111, the Relief and Welfare Bill; Senate Bill No. 106, the Occupational Disease Bill; House Bill No. 459, the Antenuptial Physical Examination Bill; House Bill No. 395, the Medical Examiner Act; Senate Bill No. 60, the Hospital Lien Bill; and Senate Bill No. 274, the Group Hospitalization Bill.

5. *Adjournment*.—The meeting was adjourned at 9:45 p. m.

MINUTES OF MEETING OF EXECUTIVE COMMITTEE

April 22, 1937

1. *Roll Call*.—The meeting was called to order by Dr. Paul R. Urmston, Chairman, at 5:40 p. m., in the Brown Room, Olds Hotel, Lansing. Present were Drs. Urmston, Bay City; A. S. Brunk, De-

troit; I. W. Greene, Owosso; T. F. Heavenrich, Port Huron; and F. E. Reeder, Flint. Also present were Dr. H. E. Perry, Newberry, President; Dr. Henry Cook, Flint, President-Elect; Dr. Wm. A. Hyland, Grand Rapids, Treasurer; Dr. W. E. Barstow, St. Louis, Councilor; Dr. L. Fernald Foster, Bay City, Secretary; Dr. L. G. Christian, Lansing, Legislative Committee Chairman; Dr. T. K. Gruber, Eloise; Dr. Dean W. Hart, of St. Johns, and Dr. Wm. R. Torgerson of Grand Rapids, members of the Medico-Legal Committee; and Executive Secretary Wm. J. Burns. Absent: Dr. H. R. Carstens, Detroit.

2. *Minutes*.—The minutes of the meeting of the Executive Committee of the Council of March 17, 1937, were read and approved.

3. *Reports on Legislative Activity*.—Dr. Perry reported on afflicted-crippled child legislation.

Dr. Christian reported on the progress of House Bill No. 261 (Basic Science Bill).

Senate Bill No. 274, Hospital Insurance Bill, was discussed and the Executive Secretary was instructed to send a copy of the bill to each member of the Executive Committee and Legislative Committee for his information.

4. *Financial Report*.—The monthly report of finances was given and a list of bills payable was given to each member of the Committee. Motion of Drs. Greene-Heavenrich that the bills payable be considered read and allowed. Carried unanimously.

5. *Program on Syphilis On WJR*.—The matter of the Michigan State Medical Society sponsoring a radio program on Station WJR dealing with syphilis was discussed. Motion of Drs. Heavenrich-Reeder that a committee composed of Dr. Fred H. Cole, Chairman of the MSMS Radio Committee, Dr. L. O. Geib, Chairman of the MSMS Preventive Medicine Committee, and Dr. Loren W. Shaffer, Chairman of the MSMS Advisory Committee on Syphilis Control, be appointed to work with Radio Station WJR on a syphilis program, and that the committee be appointed with power to act. Carried unanimously. Dr. Hyland is to be invited to the next meeting of the Advisory Committee on Syphilis Control, at which the national plan for syphilis control will be given consideration.

6. *Occupational Disease Legislation*.—Dr. Cook reported on pending legislation relative to occupational diseases, now before the Legislature.

7. *MSMS-MHA-MAR Joint Meeting with Finance Committee of State Administrative Board*.—The Chair requested Dr. Cook to report on the meeting on April 14 with the Michigan Hospital Association, Michigan Association of Roentgenologists, the Michigan Crippled Children Commission, and the Finance Committee of the State Administrative Board, relative to a fee schedule for the care of afflicted children. Report was also given on bills in the Legislature having to do with crippled and afflicted children.

8. *W.C.M.S. Resolution*.—The resolution of the Wayne County Medical Society relative to the establishment of a "Bureau of Public Relations in the A.M.A." was read and discussed. Motion of Drs. Heavenrich-Greene that the Wayne County motion be sent to the A.M.A. with the approval of the Executive Committee of the Council, MSMS. Carried unanimously.

9. *Speakers for County Medical Societies*.—Secretary Foster presented the matter of furnishing of speakers by the State Medical Society to County Medical Societies throughout the state. Motion of Drs. Heavenrich-Brunk that the State Society furnish speakers to the County Medical Societies desiring same. Carried unanimously.

10. *Report of American Foundation Studies in*

SOCIETY ACTIVITY

Government.—Leaflets describing the 1500-page report of the American Foundation re the practice of medicine in America were distributed to members of the Committee. The Executive Secretary was instructed to write the Foundation and ask for 10 copies for the members of the Executive Committee to study.

11. *Approval of Committee on Local Arrangements at Grand Rapids.*—The Secretary reported the appointment by Dr. A. B. Smith, President of the Kent County Medical Society, of the Committee on Local Arrangements for the Annual Meeting next September in Grand Rapids. The committee is composed of Dr. Vernor M. Moore, Chairman, Dr. M. S. Ballard, Dr. Leon DeVel, Dr. Wm. R. Torgerson, and Dr. A. V. Wenger. Motion of Drs. Brunk-Heavenrich that the committee as appointed by Dr. Smith be approved. Carried unanimously.

12. *Thanks to Dr. Penberthy.*—Motion of Drs. Reeder-Greene that a vote of thanks be given, and placed in the minutes of the Executive Committee, to Dr. Grover C. Penberthy for his trip to Lansing. Carried unanimously.

13. *Reporting Annual Meeting of House of Delegates.*—The Executive Secretary was instructed to contact various concerns relative to reporting the proceedings of the House of Delegates at the next Annual Session, in Grand Rapids.

14. *Letter from Dr. A. M. Hume.*—A letter from Dr. A. M. Hume of Owosso, honorary member of the Michigan State Medical Society, in which Dr. Hume expressed a strong desire to be an active member instead of an honorary member, was read. The Secretary was instructed to write a letter to Dr. Hume stating that the matter is being referred to the House of Delegates.

15. *New Office Equipment.*—The necessity for an office chair and other furniture in the executive office was discussed, and Mr. Burns was instructed to look over various products of this type and report on same at the next meeting.

16. *Report on MSMS Bonds.*—Dr. Wm. A. Hyland, Treasurer, and Chairman of the Committee to Study the MSMS Bonds, reported. Motion of Drs. Reeder-Brunk that the Committee be granted the power to use its best judgment to dispose of the bonds as they see fit, including all bonds not having an "AAA" rating. Carried unanimously.

17. *Admission Policy at U. of M. Hospital.*—Dr. I. W. Greene, Chairman, reported for his committee:

"On April first your Committee had a conference at the University Hospital with Drs. Harley Haines, J. D. Bruce, A. C. Furstenburg and Howard Cummings. Specific complaints were investigated and it was found that as a rule these were a result of misunderstandings. Frequently the patient came on an order from the Probate Court of their county. In this case, if there was any complaint it should be directed at the local authorities rather than the University Hospital. In other cases, the patient came in with a letter from some other physician than the one making the complaint.

"We felt that the University Hospital was making every effort to limit their admissions to cases coming on court orders or with letters from physicians. Errors may occur, but they are apparently infrequent.

"We would recommend that any physician who feels that he has been unfairly treated by the University Hospital send this committee data as to names and dates and an investigation will be made. General complaints and criticism are useless in settling these problems. We believe that a study of the admission chart of the University Hospital will give

the physicians of the state a fair idea of their general policy of admission."

18. *Adjournment.*—The meeting was adjourned at 8:40 P. M.

These minutes approved by

P. R. URMSTON, M.D.

Chairman, The Council.

MINUTES OF MEETING OF THE EXECUTIVE COMMITTEE OF THE COUNCIL

May 13, 1937

1. *Roll Call.*—The meeting was called to order by Dr. P. R. Urmston, Chairman, in the Olds Hotel, Lansing, at 7:30 p. m. Those present included: Dr. Urmston, Bay City; Dr. Henry R. Carstens, Detroit; Dr. F. E. Reeder, Flint; Dr. A. S. Brunk, Detroit; Dr. T. F. Heavenrich, Pt. Huron; Dr. I. W. Greene, Owosso. Also present were President Henry E. Perry of Newberry; President-Elect Henry Cook of Flint; Secretary L. Fernald Foster, Bay City; Chairman of the Legislative Committee, L. G. Christian, Lansing; Dr. J. E. McIntyre of Lansing; Dr. David P. Philips, Psychiatrist; Dr. W. B. Huntley of the Prison Staff; Parole Commissioner Gellei, of Jackson Prison; and Executive Secretary Wm. J. Burns.

2. *Minutes.*—The minutes of the meeting of April 22 were read, corrected, and approved.

3. *Medical Consulting Service in Penal Institutions.*—Dr. David P. Philips was introduced by Chairman Urmston. The psychiatrist for the Parole Board urged more interest in penal institutions by the Michigan State Medical Society. He set forth four points:

(a) The referral of parolee to private physicians for medical care, and requested that this be announced in THE JOURNAL of the MSMS.

(b) He requested a consulting staff for Jackson Prison, 4,500 inmates; Ionia Prison, 1,000 inmates; Marquette Prison, 800 inmates; such staffs to be selected by the MSMS. He outlined the great fund of clinical material in each of these institutions. Members of the staff need give but one-half day a month or every two months to this work.

(c) Insisted on the necessity for externes and internes in the prison hospital.

(d) The necessity for the State Society looking after the medical standards of penal institutions.

Dr. Philips also urged the selection of physicians for penal institutions by the MSMS, and stated that the institutions need the help of the State Society.

Parole Commissioner Gellei outlined the history of the work, and spoke of the "Bill of Corrections" in the Michigan Senate, which would permit the Director to make the appointment of prison physicians. He asked that the MSMS aid the Parole Board as per the recommendations of Dr. Philips.

Dr. W. B. Huntley of Jackson Prison further outlined medical assistance for paroled inmates of penal institutions, and the establishment of a general medical consulting service for the prisons, to be sponsored by the MSMS.

The matter was discussed generally; Dr. Christian spoke on the need of the MSMS recommending good doctors to all State Boards and institutions. Motion of Drs. Greene-Brunk that it is the sense of the Executive Committee of the Council of the Michigan State Medical Society that we coöperate in principle with the penal institutions and the Parole Board of the State of Michigan, in their problems, and that we consider any concrete proposals at a future meeting. Motion carried unanimously.

The Council, through the Chairman, expressed

gratitude to Drs. Philips, Huntley, and Mr. Gellei for this invitation to the MSMS to perform a public function, and offered the full coöperation of the State Society to the institutions of the State if and when it can be of service.

4. *Legislative Committee Report.*—Dr. L. G. Christian reported on the status of House Bill 261, the Basic Science Bill; Senate Bill 106, the Occupational Disease Bill; Senate Bill 111, the Welfare and Relief Bill; Senate Bill 274, the Group Hospitalization Bill—Dr. Henry Cook, Chairman of the Sub-committee on Group Hospitalization Legislation, also reported on this bill; on House Bill 459, the Antenuptial Examination Bill, and on House Bill 565, the Narcotic Drug Bill. Motion of Drs. Greene-Reeder that the report of the Legislative Committee, and its recommendations, be accepted and be acted upon. Carried unanimously.

5. *Financial Report.*—The report of the Society and of the JOURNAL for April was presented. The bills payable for the month were also presented, and on motion of Drs. Carstens-Greene, the Secretary was instructed to pay the bills as listed. Carried unanimously.

The Council authorized the Secretary to redeposit the \$5,000 Certificate of Deposit, which just fell due, in two Certificates of Deposit, one for \$3,000 and one for \$2,000.

6. *Representatives of the MSMS to the A.M.A.*—Motion of Dr. Greene seconded by several, that the Chairman of the Legislative Committee, the Chairman of the Council, President-Elect, and the Secretary of the MSMS be authorized to attend the American Medical Association's Annual Meeting in June, 1937. Carried unanimously.

7. *Report was given re opinion of committees* of the American Bar Association on the operation of medical defense plans by State Medical Associations. This matter was referred to the Medico-Legal Committee of the MSMS for study and opinion to the Executive Committee at a later date.

8. *Recommendation of the Committee on Scientific Work* that the Scientific Exhibit of 1937 be not held, was presented to the Executive Committee of the Council. Motion of Drs. Carstens-Reeder that the Committee on Scientific Work be directed not to hold a Scientific Exhibit this year. Carried unanimously.

9. *Maternal Health Committee Report.*—The report of the committee on the subject of the obstetrical situation at the U. of M. was presented by Secretary Foster. The Chair stated that he and Secretary Foster intended to have a meeting in the near future with Drs. Miller and Furstenberg of the University. The Executive Committee instructed that Drs. Miller and Furstenberg be invited to a meeting of the Executive Committee of the Council, for a further discussion of this problem.

10. *Schedules A, B, C, and D.*—Report on the present status of Fee Schedules A, B, C, D, was given by the Executive Secretary.

11. *Admission Policy at U. of M. Hospital.* Dr. Greene, Chairman of this committee, presented a further report of his committee's activities.

12. *Society Activity.*—Secretary Foster reported on a refresher course being given under the auspices of the Crippled Children Commission, in Menominee on June 2; he stated that Delegate Louis J. Hirschman would present to the A.M.A. at its House of Delegates a resolution re the necessity for public relations by the national medical body; he announced that "State Society Nights" were being arranged at Dowagiac on May 20, at Kalamazoo on May 27, and at Adrian on June 15.

The Executive Secretary read a letter from Dr.

Ralph H. Pino, Chairman of the Medical Economics Committee, regarding medical service for old-age pensioners. This problem was referred back to the Medical Economics Committee for study and report to the Executive Committee of the Council.

13. *Adjournment.*—The meeting was adjourned at 11:00 p. m., the Chair thanking all for their attendance and helpful advice.

COUNCIL AND COMMITTEE MEETINGS

1. *May 2, 1937*—Committee on Scientific Work—Olds Hotel, Lansing—3:00 P. M.
2. *May 6, 1937*—Legislative Committee—Olds Hotel, Lansing—6:30 P. M.
3. *May 13, 1937*—Executive Committee of The Council—Olds Hotel, Lansing—6:30 P. M.
4. *June 16, 1937*—Executive Committee of The Council—Statler Hotel, Detroit—2:00 P. M.

SUPPLEMENTARY ROSTER

The following members of the Michigan State Medical Society were omitted from the Directory Number of THE JOURNAL through clerical error. Apologies.

Berrien County

Tonkin, Ernest W.....Niles

Ionia-Montcalm County

Pinkham, J. F.....Belding

Marquette-Alger Counties

Keskey, I.....Marquette

Monroe County

Flanders, J. P.....Monroe
Long, Sara.....Monroe
Karch, A. W.....Monroe

Northern Michigan

McClure, Robert James.....Charlevoix

Ottawa County

Coburn, M.....Coopersville

Saginaw County

Clayton, Archer A.....Saginaw
Jordan, Leo A.....Saginaw
Pietz, Frederick A.....Saginaw

St. Clair County

MacLaren, A. D. (Honorary).....Port Huron

Wayne County Medical Society

Barnett, Saul E.....Detroit
Best, T. H. Edward.....Detroit
Breon, Guy L.....Detroit
Clark, Harry L.....Detroit
Diebel, Wm. H.....Detroit
Dowdle, Edw.....Detroit
DuBois, Paul L.....Detroit
Goldberg, Arthur.....Detroit
Haig, D. S.....Detroit
Hamburger, A. C.....Detroit
Hotchkiss, L.....Detroit
Kernick, M. O.....Detroit
Leithauser, D. J.....Detroit
Lewis, David H.....Detroit
McLean, Harold G.....Detroit
Smith, Eugene (Honorary).....Detroit
Walker, Thaddeus.....Detroit
Weisberg, J.....Detroit
Zinterhofer, Louis.....Detroit

COUNTY SOCIETIES

CALHOUN COUNTY

WILFRED HAUGHEY, M.D.
Secretary

The April meeting of the Calhoun County Medical Society was called to order at the Kellogg Hotel, Tuesday evening, April 6, 1937, at 8:00 P. M., by President C. W. Brainard, following dinner.

Dr. M. R. Kinde introduced three guests: Dr. Lena K. Sadler, Dr. Smiley, of the Medical Department, Cornell University, Ithaca, N. Y., and Dr. H. K. Otto, of the Kellogg Foundation.

The minutes of the last meeting were approved as printed in the Bulletin.

Dr. Nelson, for the committee on venereal disease, presented a communication from a group representing the Parent-Teachers Association, and fifteen other club groups regarding the sale of contraceptive materials through slot machines, individual peddlers, filling stations, etc. There is no law in Michigan regulating such sales. Oregon has such a law, a copy of which was attached.

Dr. Winslow moved that our society endorse this movement, seconded by Dr. Chynoweth. Carried.

The Secretary presented correspondence from the president and secretary of the Michigan State Medical Society, also the Legislative Committee, chiefly regarding the basic science law and the need to write letters and make personal contacts with our representatives and senator, urging their support.

The secretary's letter called for a certified list of all our paid members to date, for the forthcoming directory.

A letter from the Northern Tri-State Medical Association was read, transmitting program of the meeting of April 13, 1937, at Jackson.

Dr. Kinde was asked to introduce the speaker, which he did very graciously, recounting Dr. Walter S. Sadler's many accomplishments, teaching record, books, et cetera.

Dr. Sadler gave a most sane talk on Psychiatric and Mental Hygiene problems, using ordinary language we could all understand. That was one of the earliest points he made, that the language should be simplified. We should make physicians more psychiatric minded instead of making more psychiatrists.

There are now more hospital beds occupied by mental patients than by all others. Much of this can be prevented by early recognition of states that will later develop into mental unbalance and applying correction early. In Illinois the expense of caring for this group of cases equals all spent on education.

The talk was well interspersed with humor and the attention held to the very last.

Meeting adjourned at 10:00 P. M. Attendance at the dinner was fifty-two, at the meeting seventy four.

EATON COUNTY

THOMAS WILENSKY, M.D.
Secretary

The Harriet Chapman Hospital at Eaton Rapids was host to the Eaton County Medical Society when it met on the evening of May 6 for its postponed April meeting.

All were agreed that the chickens had not died

in vain and an enthusiastic vote of thanks was tendered to the cook in recognition of her culinary triumph.

Following dinner, Dr. Joseph Davis, popular director of the Eaton County Health Department, introduced the speaker, Detroit Syphilologist Dr. Ray F. Dixon. Dr. Dixon, who has had a vast experience in the epidemiology, diagnosis and treatment of syphilis in all of its protean manifestations, and who possesses the priceless talent of the true teaching clinician, spoke for an hour on this so-called "social disease" which has so recently been accorded much prominence in the news sheets of the nation.

The pictures which Dr. Dixon projected for his audience, and which were snapped by himself in office and clinic, assisted greatly in enhancing the effectiveness of the talk.

Dr. J. W. Davis discussed the subject of syphilis in its relation to public health. He stressed particularly the point, that every case of recent syphilis should be regarded as a very dangerous and highly infectious communicable disease, and that contacts be carefully scrutinized for its presence.

Many questions were directed to Dr. Dixon, following which the meeting was adjourned at 10:00 P. M.

INGHAM COUNTY

R. J. HIMMELBERGER, M.D.
Secretary

The regular monthly meeting of the Ingham County Medical Society was held at the Elks' Home on March 16, 1937. A country-style chicken dinner was served at 6:30.

Following the dinner the meeting was called to order by the President, Dr. Milton Shaw.

The minutes of the previous meeting were approved as printed in the *Bulletin*. There was no correspondence. The President announced that the Annual Clinic would be held on April 29, at the Hotel Olds.

Dr. Shaw then introduced Dr. Henry E. Perry, President of the Michigan State Medical Society. Dr. Perry, in his short talk, emphasized the importance of writing our Senator and Representative asking them to give their support on legislative matters, also thanking them for the work they have already done.

Dr. Shaw then introduced "Bill" Burns, the State Society's Executive secretary. Mr. Burns suggested our writing personal letters to our senator to explain the facts about the Basic Science Bill to him.

Dr. L. G. Christian, Chairman of the State Legislative Committee, was called upon; he stated that the Occupational Disease bill and the Welfare and Relief bills were of importance to the medical man. The Occupational Disease bill in its comprehensive form is a menace to medical practice. Dr. Christian thought the bill would be defeated in this form. He also stated that work was being done on the Welfare and Relief bills so that the person concerned would have his own choice of physician, dentist, pharmacist and undertaker.

Dr. Christian read Representative Brown's editorial on the Basic Science Law, which was very favorable.

The Secretary then read the proposed amendments as presented to the Society at the last meeting. Their adoption was moved by Dr. Burhans and seconded by Dr. Meyer.

Dr. L. Snyder stated that he had given the mat-

ter some thought and that he wished to make revisions in the amendments. His changes were read in whole.

Dr. Snyder moved the adoption of the amendments. Dr. Dunn seconded the motion.

After some discussion, Dr. Snyder's amendments were voted upon and passed.

Then the original amendments were voted upon and passed.

Dr. Shaw then introduced Dr. Stucky, Chairman of the Public Health Committee. Dr. Stucky in turn introduced Dr. Breakey, who gave a very comprehensive report on findings of the committee from their recent questionnaire sent to members of the society. This questionnaire dealt with a survey of the venereal disease situation in the county. A copy of the report is attached to the minutes.

Dr. McIntyre moved that the Preventive Medicine and Public Health Committee's report on Venereal Disease Control be accepted and further study of the subject material be recommended. Seconded by Dr. Hodges. Motion passed.

Dr. Breakey then introduced Dr. Russell Herrold, Assistant Professor of Urology of the University of Illinois, and a member of the Executive Committee of the American Neisserian Society.

Dr. Herrold gave a very interesting and educational talk on "The Criterion of Cure as it Pertains to Venereal Infection."

The Ingham County Medical Society held their Annual Clinic on Thursday, April 29, 1937, at the Hotel Olds, Lansing, Michigan.

Speakers for the afternoon session were as follows:

- Dr. Francis Seneor, Chicago
"Diagnosis and Treatment of Early Syphilis"
- Dr. Joseph L. Miller, Chicago
"Treatment of Nephritis"
- Dr. Chevalier J. Jackson, Jr., Philadelphia
"Post-Operative Pulmonary Complications"
- Dr. Herbert Willy Meyer, New York City
"Excursions into Fields of Surgery."

Following the afternoon meeting, a social hour was held, before the call to dinner, which appeared to be enjoyed by all those present.

Dr. Alfred A. Strauss of Chicago, gave the evening paper. His subject was: "The Surgical Treatment of Peptic Ulcer."

Registration figures showed an attendance of 219 at the clinic.

Following is the list of those registered and the County Society of which they are members.

- Allegan County*—O. D. Hudnutt, B. Van Der Kolk.
- Bay County*—G. McDowell.
- Barry County*—G. Fisher, R. B. Harkness, C. Lund, B. Swift.
- Branch County*—K. Olmsted, H. Scoirll.
- Calhoun County*—J. Cooper, E. Eggleston, Margery Gillan, A. Humphrey, D. Morrison, B. Overholt, Clara Rada-baugh, J. Rosenfeld, G. Slagle, L. Verity, C. Wencke, R. Walters, F. Walters.
- Clinton County*—C. Foo, D. Hart, T. Ho, F. Luton, W. McWilliams, F. Richards, S. Russell.
- Eaton County*—A. H. Burleson, J. W. Davis, D. V. Hargrave, J. Lawther, A. W. Myer, E. M. Paine, P. H. Quick, Vinton J. Rickert, C. J. Sevensen, L. G. Sevensen, A. G. Sheets, B. Van Ark, T. Wilensky.
- Genesee County*—L. M. Bogart, D. R. Brasie, N. Delbingo, G. E. Drewger, J. W. Evers, A. H. Kretchmar, W. C. Reid, H. G. Rosenblum, R. D. Scott, G. D. Sutton.
- Huron County*—J. B. Henderson.

Gratiot, Isabella and Clare—W. E. Barstow, B. C. Hall, A. D. Hobbs, H. F. Kilborn.

Ingham County—C. D. Barrett, H. S. Barthblomew, A. J. Batting, T. I. Bauer, W. C. Behen, E. G. Bellinger, R. S. Bolin, R. S. Breakey, E. W. Brubaker, K. B. Brucker, O. H. Bruegel, R. A. Burhans, W. J. Cameron, A. M. Campbell, L. G. Christian, W. Clark, J. C. Corsaut, Frank Cushman, C. L. Darling, C. S. Davenport, C. J. DeVries, C. Doyle, C. R. Doyle, Fred Drolett, Laurence Drolett, F. C. Dunn, F. M. Dunn, R. L. Finch, D. Fisher, E. H. Foust, H. L. French, D. A. Galbraith, C. B. Gardner, R. E. Goldner, R. J. Hall, A. E. Hall-Kent, D. W. Harris, L. C. Hart, H. B. Haynes, F. B. Heckert, J. K. Heckert, E. J. Hermes, R. J. Himmelberger, F. M. Huntley, C. C. Huggett, M. S. Hurth, K. H. Johnson, F. Jones, R. E. Kalmbach, C. D. Keim, L. C. Kraft, M. C. Loree, L. C. Ludlum, R. R. McCrumb, J. E. McIntyre, O. B. McGillicuddy, R. J. McGillicuddy, H. R. Meyer, Harold Miller, R. J. Morrow, P. J. Ochsner, S. Osborn, A. E. Owen, T. L. Peacock, R. A. Pinkham, R. H. Phillips, H. J. Prall, O. M. Randall, E. J. Robson, H. C. Rockwell, J. S. Rozan, C. V. Russell, J. F. Sander, M. Shaw, C. C. Slemmons, D. M. Snell, L. M. Snyder, P. C. Spencer, A. A. Steiner, Frank Stile, F. C. Strauss, A. C. Stucky, Gertrude Sullivan, K. W. Toothaker, L. C. Tow, F. L. Troost, E. R. Van der Slice, T. P. Vander Zalm, R. O. Webb, W. G. Wight, W. H. Welch, J. M. Wellman, H. W. Wiley, H. S. Willson.

Jackson County—J. O. Scott, A. J. Roberts, G. R. Bullen, R. M. Cooley, C. E. De May, W. L. Finton, W. L. Foust, T. E. Hackett, W. H. Lake, W. W. Lathrop, M. C. McLaughlin, J. L. Miller, C. D. Munro, J. J. O'Meara, H. W. Porter, G. R. Pray, F. F. Pray, P. A. Riley, T. E. Schmidt, E. A. Thayer.

Kalamazoo County—S. E. Andrew, R. J. Armstrong, M. W. Behan, L. J. Crum, W. Der Bleyker, B. J. Dowd, R. B. Fast, W. G. Hoebeke, J. R. MacGregor, J. G. Malone, M. Pellen, A. E. Pullon, L. H. Stewart.

Livingston County—J. W. Toan.

Montcalm, Ionia Counties—R. W. Fuller, W. W. Norris, J. Van Loon.

Kent County—P. W. Bloxson, F. A. Boet, W. J. Butler, W. G. Calvin, L. H. Chamberlin, M. E. Cucannon, R. J. DeMol, D. De Vries, J. F. Failing, T. W. Hammond, E. F. Lamb, N. E. Lanning, S. J. Miller, W. N. Shellman, V. E. Stover, C. E. Sugg, H. E. Veldman.

Muskegon County—R. V. August, R. G. Olson.

Newaygo County—H. R. Moore.

Oakland County—F. D. German.

Saginaw County—J. A. MacDonell, J. L. Markey, F. A. Poole.

Shiawassee County—R. G. Alexander, R. Brown, W. B. Fillinger.

Wayne County—L. E. Becuwkes, W. L. Foster, C. Peabody.

The May meeting of the Ingham County Medical Society was held on May 18, 1937, at the Hotel Olds, Lansing. The meeting was preceded by a dinner served at 6:45 P. M.

After the dinner, the meeting was called to order by the president, Dr. Milton Shaw.

During the usual business routine a resolution was read honoring Dr. Leo Christian, chairman of the State Legislative Committee, for his work and sacrifices in getting the Basic Science Bill through the legislature.

Following the short business meeting the president introduced the guest speaker of the evening, Dr. Louis M. Warfield of Milwaukee, Wisconsin.

Dr. Warfield chose as his subject, "Peripheral Circulatory Collapse; Its Nature and Treatment."

Dr. Warfield reviewed the physiology of the circulatory apparatus, and discussed the more recent conceptions of the failure of circulation in certain types of infection, stating that in most cases in which the heart had not been previously damaged, the failure was due to the peripheral circulatory rather than the heart. He discussed the various remedies that could be used in these cases.

The paper was discussed by many of those present and after the speaker had adequately answered all questions the meeting was adjourned.

COUNTY SOCIETIES

JACKSON COUNTY

H. W. PORTER, M.D.
Secretary

The April meeting of the Jackson County Medical Society was supplanted this year by the annual meeting of the Northern Tri-State Medical Association on Tuesday, April 13, 1937. Nearly every member of this society attended the clinic at some time or other during the day and a majority of the members were present at the opening address and stayed through the entire program. The consensus of opinion was that this was one of the best programs from the standpoint of the quality of the speakers and the balance of the subjects presented that has ever been offered in this city.

The first speaker of the morning session was Dr. Ernest E. Irons, professor of medicine and, until recently, dean of the medical school at Rush Medical College in Chicago. The subject was the "Treatment of Chronic Arthritis."

The next speaker found a close friend in our society. This man, Dr. Edward A. Oliver, clinical professor of dermatology also at Rush Medical College, was a classmate, room mate, fraternity brother, and best man at the wedding of Dr. H. A. Brown. He spoke on "Dermatological Problems Encountered in General Practice."

"Compound Fractures and Their Complications" was the subject of the next address, the speaker being Dr. Carlo Scuteri, associate surgeon of the Cook County Hospital, Chicago. This address was accompanied by a motion picture.

The fourth speaker of the morning was Dr. E. N. Collins of the Crile Clinic, whose subject was "Disease of the Colon."

Dr. Ray R. Grinker, professor of neurology of the University of Chicago, then spoke on "The Epilepsies."

The last speaker of the morning was Dr. Roscoe R. Graham, professor of surgery at the University of Toronto.

The meeting was then adjourned for the lunch hour with the luncheon being served in the main dining room and the lobby of the hotel.

Dr. Elmer L. Severinghaus, assistant professor of medicine at the University of Wisconsin, opened the afternoon session with the topic "Current Endocrine Problems in Gynecology."

The second speaker was Dr. John S. Lundy of the Mayo Clinic, chief of the department of anesthesia. His subject was "Various Anesthetic Agents — Especially Some of the Newer Preparations."

Dr. George M. Curtis, F.A.C.S., professor of surgery, Ohio State University, Columbus, then spoke on "Intrathoracic Goiter."

Dr. Henry O. Mertz, professor of genito-urinary surgery, Indiana University, Indianapolis, Indiana, gave a very instructive and interesting paper entitled "Urinary Tract Symptoms," as they influence different diagnoses of abdominal disease.

Dr. W. P. Tew, F.R.C.S., professor of obstetrics, University of Western Ontario Medical School, London, discussed "Conservative versus Radical Obstetrics and Gynecology."

Dr. Allan J. Hruby, secretary of the board of directors of the Municipal Tuberculosis Sanitarium, Chicago, then addressed the members of the Northern Tri-State Medical Association on "The Value of the Collapse Therapy Program in the Control of Pulmonary Tuberculosis."

"The health of the people is the supreme law," Dr. Hruby said, and he amended this famous saying to read, "The health of the people is the direct mandate of the public health officer." He took this as the theme of his paper.

There was a breathing spell allowed at the end of Dr. Hruby's paper and both cocktail bars did a flourishing business until the ball room could be rearranged for the banquet at 7:00 P. M. The banquet was better attended than any of the Northern Tri-State Society's in the last four years and Jackson did much toward making this possible, nearly every member being present.

Dr. W. H. Marshall of Flint, retiring president, presided at the banquet and introduced Dr. Crowley, our president, for a few words of welcome, which "Ed" did in his customary precise manner. The speaker of the evening was then introduced in the person of Dr. Phillip H. Kreuscher, assistant professor of surgery, Northwestern University Medical School, Chicago.

The meeting was then adjourned until 1938, when an Ohio city is to be host, the name not having been selected yet. The 1937 attendance gave Ohio forty members with Toledo leading with seventeen; Indiana sent forty-one guests with twelve from Fort Wayne; Michigan had 110 representatives of whom sixty-seven were members of the Jackson County Medical Society. There were thirteen guests, giving a total attendance of 204, a worthwhile showing for an excellent program.

MONROE COUNTY

FLORENCE AMES, M.D.
Secretary

Monroe County Medical Society has had a series of splendid meetings this spring. On March 18, Dr. Glenn Brough, of Detroit, spoke on fractures. This highly important subject was covered in an interesting and informative manner.

On April 15, Dr. Fred Douglass, of Toledo, who spent several weeks at medical centers in France and England during the winter, spoke on carcinoma of the breast and of the rectum. He compared English and French methods of treatment with the American. In passing, he remarked on the bad effect of the panel system on the practice of medicine in England.

On May 20, the society had the pleasure of viewing several medical films shown by courtesy of the Mead, Johnson Company.

We have two new members, Dr. F. L. Graubner and Dr. J. P. Flanders, both of Monroe.

Our society is very proud of our auxiliary, recently organized under the able leadership of Mrs. A. H. Reisig, Monroe.

MUSKEGON COUNTY

LELAND E. HOLLY, M.D.
Secretary

The regular meeting of the Muskegon County Medical Society was held at the Century Club on Friday, March 26, at 6:30 P. M. Following dinner a short meeting of the Medical Participating Association was held.

The business meeting of the County Medical Society was called to order by President Mandeville at 8:05 P. M.

Dr. Stone discussed the physical examinations of food handlers as is carried out in the City of Muskegon and Muskegon Heights. He offered the following motion:

"THAT in addition to the regular examination of food handlers, the physician shall take a Kahn on each applicant. Further he shall take smears of

the mouth and genitalia when indicated, the specimens to be sent to local hospitals for examination and the present price of \$2.00 to include the above mentioned additional examinations."

The motion was seconded by Dr. Olson. After a frank discussion the motion was put to a vote and carried.

Due to the fact that many patients with venereal disease are treated for varying lengths of time, but, before a cure obtains, they discontinue treatment either because of lack of funds or because of indifference to their physical condition; and further because of the fact that there is no record and no follow-up done on these cases, due to lack of information at the Health Department of the City, a second motion was submitted by Dr. Stone:

"That each case of venereal disease being treated by a physician who discontinues such treatment before a cure obtains, shall be reported to the Health Department of the City of Muskegon after a reasonable interval (two weeks)."

The motion was seconded by Dr. Pangerl. In the discussion which followed this motion, it was brought out that necessary procedures would be taken by the authorities to see that patients who discontinue treatment because of indifference to their condition are returned to their physician, or their homes placarded, in line with the rules and regulations of the State Department of Health, which includes venereal diseases among the communicable group. Further discussion brought out the fact that the Health Department will furnish blanks for reporting such cases. This motion was carried unanimously.

The Speaker of the evening, Dr. Willard Van Hazel, associate professor of surgery at the University of Illinois, was introduced by Dr. Boonstra. Dr. Van Hazel talked on "Empyema."

A very frank discussion of this excellent paper, which was presented in a most, clear-cut and effective manner, followed.

Meeting adjourned at 10:00 P. M.

OAKLAND COUNTY

O. O. BECK, M.D.
Secretary

Forty-two members of the Oakland County Medical Society journeyed to Cleveland by boat on the night of May 4 and spent the following day as guests of Dr. Crile at the Cleveland Clinic. Apparently, some sort of record was established when forty-two members of the Oakland County Medical Society were able to leave their practice for a single day and go to a point as far distant as Cleveland. However, it was the unanimous verdict of all who went that the trip was very worth while and that the precedent now established should be continued as an annual affair. Surrounded as we are by numerous outstanding medical centers, within an easy night's ride, we should not fail to take advantage of our opportunities.

The day at the Clinic was a very full one, the group being divided into Medical, Surgical, and Eye, Ear, Nose, and Throat. The medical group consisted of a series of half hour clinics on a large variety of subjects. The clinics on "The Management of Peptic Ulcer" and "The Management of Bronchial Asthma" were each worth the entire trip, if we had had nothing else. The surgical group had the opportunity of seeing Dr. Crile do a resection of the celiac ganglia for hypertension. Those who witnessed this demonstration were fully convinced

that Dr. Crile's international reputation rests on a secure basis.

We were Dr. Crile's guests for luncheon in the Sun Room on the eighth floor, at which time Dr. Crile welcomed the group to the hospital. The afternoon was devoted to a combined series of clinics and closed with a half hour talk by Dr. Crile on "The Ductless Glands and Sympathetic Nervous System with Reference to Certain Well Known Diseases." Following this, a visit was paid to the Museum of Comparative Anatomy of the Energy Controlling Mechanism. In this room there are mounted zoological specimens obtained personally by Dr. Crile and one of his associates on a trip to Africa. These specimens illustrate the relationship of the size of the brain, thyroid, adrenals, and celiac ganglia to the activities of the animal in general.

At six o'clock we returned to the Hotel Cleveland, where Bob Hasner had made elaborate arrangements for our reception. Forty-two members, in addition to several guests from the Clinic, sat down to a beautifully appointed dinner. Looking down the long table it seemed that we had nearly as large an attendance in Cleveland, 180 miles from Pontiac, as we are accustomed to have when meetings are held somewhere in Oakland County.

This trip was made possible by the energy and planning of Bob Hasner. He arranged all of the details and there was no hitch at any point. It was a trip long to be remembered and our hats are off to Bob Hasner and George Sherman for this splendid affair.

SAINT CLAIR COUNTY

G. M. KESL, M.D.
Secretary

A regular meeting of the St. Clair County Medical Society was held Tuesday, May 4, 1937, at Port Huron Hospital. Dr. C. M. Carruthers of Sarnia, Ontario, was a guest. The meeting was presided over by President Howard O. Brush. Dr. R. H. Campbell now in practice in the city of St. Clair was elected to active membership.

Minutes of the last meeting were read and approved.

The society went into executive session for a few minutes to discuss important business. Drs. Callery and MacKenzie spoke of the arrangement of the profession with the Free Bed Association in the past and a committee was appointed to meet with the ladies to alter or continue the arrangement.

Drs. MacPherson, Patterson and Sites spoke of the present arrangement for care of crippled children by a County Physiotherapist and of the desirability of a change to improve work. Dr. MacPherson was instructed to use his own judgment when he met with the group to assemble under the direction of the Probate Court in the matter of care of crippled children.

Before the scientific address began a group of twenty-five graduate nurses were welcomed to the meeting. Dr. Brush introduced Dr. Alexander M. Campbell of Grand Rapids who spoke on the subject, "Indications for and Abuse of Cesarean Section." The speaker stressed the importance of obstetrics, the need of younger men to specialize therein, the conservative management by the obstetrician of the average case, the absolute need of early mature consultation and the use of local anesthesia in doing section.

Discussion of this very fine address preceded adjournment.

COUNTY SOCIETIES

WASHTENAW COUNTY

L. J. JOHNSON, M.D.
Secretary

The April meeting of the Washtenaw County Medical Society was held in the Ladies Dining Room of the Michigan Union on April 13, 1937. Dr. Sidney LaFever, President-Elect, was in the chair. Thirty-seven members attended. The minutes of the March meeting were approved without correction as they appeared in the bulletin.

Dr. John DeTar reporting for the Public Relations Committee stated that the staff of the Beyer hospital in Ypsilanti was being organized to meet the demands of the State Society. This will place the Beyer hospital on the accredited list of Michigan hospitals qualified to care for afflicted children. Dr. DeTar also reported that he had been informed by the County Board of Supervisors that they had appointed a committee for the investigation and study of County Health Units. This committee is to hold a joint meeting with a committee from the Washtenaw County Medical Society within the near future, at which time all data available relative to indigent care in Washtenaw County will be reviewed and analyzed.

Dr. L. J. Johnson, Chairman of the Board of Censors, reported favorably on the application for membership of Dr. John D. Steele, Jr. He was elected to membership.

Resolutions on the death of Dr. Woodbridge were read by Dr. C. L. Washburne and it was moved, seconded and passed that the family be sent one copy of these resolutions and that one copy be spread upon the minutes of this Society.

Resolutions on the death of Dr. Schutz were read by Dr. William Brace and it was moved, seconded and passed that the family be sent one copy of these resolutions and that one copy be spread upon the minutes of this Society.

Dr. H. H. Cummings reported that the Basic Science Bill was in the process of litigation.

President-Elect LaFever stated that he had corresponded with the President of the Woman's Auxiliary and that they had advised him to send them a list of names of the wives of the doctors with recommendation for a chairman. This request will be complied with by President Nesbit as soon as he returns to the city.

Dr. Bruce H. Douglas, Controller of Tuberculosis of Detroit, was introduced by Dr. Henry Field. As usual, Dr. Douglas gave an excellent discussion of the control of tuberculosis, pointing out among other things that the disease is on the decline and that it can be further lessened. No longer is cattle considered an important source of infection, but human contact is the important method of spread. Early diagnosis and early isolation of infected cases was stressed as the most important factor of control. In the study of Detroit cases 22 per cent were early cases and 78 per cent late cases. The private physician is the case finder and all plans for control must be based on him. In Detroit 63 per cent of the recorded cases were reported by private doctors.

In commenting on a plan to further control of tuberculosis Dr. Douglas recommended that the first step was to enlist the private physician and provide refresher courses in tuberculosis. Study should be directed towards all contacts, both continual and casual, and in localities where mortality is high all persons should be encouraged to present themselves for examination. A card system whereby the doctor reports negatives on one card and positives on three cards is being used in Detroit.

Dr. Marianna Smalley presented graphic charts of tubercular cases in Washtenaw County showing the spread of the disease through the families and the results of continued contacts. Dr. Carlton Pierce demonstrated the x-ray films on these cases.

Discussion was offered by Drs. Brownwell, Law, Wessinger and Field.

The meeting adjourned at 8:35 P. M.

WAYNE COUNTY

J. A. HOOKEY, M.D.
Secretary

At the annual meeting of the Wayne County Medical Society on May 17, 1937, the following new officers were elected: Dr. C. E. Umphrey, president; Dr. Henry R. Carstens, president-elect; Dr. J. A. Hookey, secretary; Dr. Wm. R. Clinton, chairman, Surgical Section; Dr. C. D. Benson, secretary, Surgical Section; Dr. E. D. Spalding, chairman, Medical Section; Dr. Warren B. Cooksey, secretary, Medical Section; Dr. Allan McDonald, trustee for five years; Dr. Fred H. Cole, trustee for one year.

Dr. Thomas K. Gruber is the retiring president.

THE BUSINESS SIDE OF MEDICINE

(Continued from page 402)

What is the patient's reaction? Why, he says to himself, "What does that Doctor know about obligations? He has a lot more money than I have."

No one consciously provokes a reader; the trouble is we forget him. Contrast an approach like this:

Dear Mr. Jones:

I know that medical bills often come unexpectedly and do not fit into the family budget, and I want to help all I can, so if you will just let me know the situation I am sure we can make arrangements that will help us both. Thanking you in advance for your coöperation, I am

Sincerely,

Dr. Blank.

Is not such an appeal much more likely to get the money, keep a patient, and make a friend? If your letter is ignored as often it will be, the same interest in the patient's problems should be emphasized in further correspondence. Showing irritation at the patient's evident neglect only makes a bad matter worse.

It Pays

Thoughtful attention to such little details as appearance, reality, and consideration in handling your correspondence will certainly have a tendency to widen your circle of friends both within the profession and outside, and is likely to pay big dividends in actual money as well.

WOMAN'S AUXILIARY

MRS. A. V. WENGER, *President*, 132 Grand Avenue, N. E., Grand Rapids.
MRS. G. C. HICKS, *President-Elect*, 1009 Wildwood Ave., Jackson.
MRS. CLAIRE L. STRAITH, *Vice President*, 19305 Berkley Drive, Detroit.
MRS. FRANK W. HARTMAN, *Press Chairman*, 7440 La Salle Blvd., Detroit.
MRS. CARL F. SNAPP, *Secretary-Treasurer*, 980 Plymouth Road, S.E., Grand Rapids.

Eaton County

The Woman's Auxiliary to the Eaton County Medical Society held their April meeting one week late, on May 6, in Eaton Rapids. After having dinner at the Royal Cafe, we met at the home of our president, Mrs. Thos. Wilensky. The meeting was called to order by our president. The secretary's report was read and approved. The nominating committee consisting of Mrs. Bradley, Mrs. Huber and Mrs. Sassaman presented the following nominations for the coming year: President, Mrs. Anderson; vice president, Mrs. L. Sevener; secretary, Mrs. Brown; treasurer, Mrs. Engle. Mrs. Stimson, as program chairman, introduced Mrs. Tom Mingus of Eaton Raids, who gave us a very interesting review of "Inside Europe" by John Gunther. We were very happy to welcome back into our fold Mrs. J. W. Davis of Charlotte, who has been in Baltimore, Maryland, for the past nine months where her husband has been taking postgraduate work.

MRS. FRANK W. HARTMAN,
State Press Committee.

Kalamazoo Academy

Thirty-four members of the Kalamazoo Woman's Auxiliary attended the April meeting held April 20 at the home of Mrs. William G. Hoebeke. Following the usual coöperative dinner a brief business meeting was held. Mrs. F. T. Andrews reported on the Basic Science bill. Bridge and a social time concluded the evening's program.

The annual meeting and election of officers was held May 18 at the home of Mrs. Frederick M. Doyle. Covers were placed for forty-six at dinner. Preceding the business session Mr. Joel Lay of Chicago spoke on the Community Concerts to be held in Kalamazoo next winter.

The annual reports of all officers and committee chairmen were read and accepted and all business for the past year concluded.

The officers elected who will carry on the group's activities next year are: President, Mrs. W. W. Lang; president-elect, Mrs. F. M. Doyle; vice president, Mrs. I. W. Brown; secretary, Mrs. Ralph Shook; treasurer, Mrs. Wm. D. Irwin.

Brief plans for a few summer outings at the lake homes of members were made.

(Mrs. F. M.) WILMA G. DOYLE,
Chairman, Press and Publicity.

Saginaw County

Mrs. Lloyd C. Harvie was elected president of the Saginaw County Medical Auxiliary Friday afternoon following a luncheon at the Midland Country club. Other officers named are: Vice-president, Mrs. Oliver W. Lohr; secretary, Mrs. Charles R. Murray; treasurer, Mrs. Cecil W. Ely.

Luncheon was served for 40 persons at one large table on the club porch. Large white bowls filled with red tulips formed the attractive table decorations.

After the business meeting, at which annual reports were given, bridge was played. High scores went to Mrs. R. S. Jiroch and Mrs. Allan A. Strimbeck (guest from Des Moines, Iowa). Mrs. A. E. Leitch won the house prize.

Wayne County

April and May have been especially busy months for the Women's Auxiliary to the Wayne County Medical Society.

On April 9, following a luncheon at medical headquarters, approximately 100 members and their friends visited the Women's Division of the House of Correction at Plymouth, Michigan. Mrs. K. Henry Campbell, Assistant Superintendent, gave a brief résumé of the history of the institution and explained the work that is being carried on there.

On May 7, the Grand Finale of the neighborhood Bridge Tournament was held at the Woman's City Club. Close to 300 women gathered to enjoy a delightful dessert, previous to viewing the fashions by Julie, Inc. The proceeds of this annual project are used to place *Hygeia* in the schools.

On April 26, a special committee of the Auxiliary assisted by about forty daughters and sons of the physicians, decorated the stage and was present early to receive the guests as they arrived to enjoy the annual free concert of the Doctor's Symphony Orchestra and Glee Club. The Concert was held in the main auditorium of the Art Institute and the seating capacity of more than 1,200 was filled and many persons stood throughout the evening.

Mrs. Roger V. Walker, president of the Auxiliary, presided on Wednesday of the Annual Cooking school sponsored by the *Detroit News* and introduced Jessie DeBoth, famous culinary expert, to 5,000 persons in the Masonic Temple.

On May 14, following a luncheon, a board meeting at the home of Mrs. Walker, the members arrived at two o'clock for the annual meeting and election of officers. The reports of the many accomplishments of the past year were gratifying and detailed accounts will appear in a later issue of the JOURNAL. Approximately seventy new members' names will appear in the year book of 1937-38. All of last season's officers were reelected, excepting the corresponding secretary, and are as follows: President, Roger V. Walker; first vice president, Mrs. Ledru O. Geib; second vice president, Mrs. Audrey O. Brown; third vice president, Mrs. Clifford B. Loranger; treasurer, Mrs. Chas. E. Dutchess; recording secretary, Mrs. Wm. G. Mackersie; corresponding secretary, Mrs. T. Grover Amos; financial secretary, Mrs. Eldon C. Baumgarten; custodian, Mrs. Thos. K. Gruber.

Their Fortune

Two young Irishmen in a Canadian regiment were going into the trenches for the first time, and their captain promised \$1 for every one of the enemy they killed.

Pat lay down to rest while Mike watched. Pat had not lain long when he was awakened by Mike shouting, "They're coming! They're coming!"

"Who's comin'?" shouts Pat.

"The enemy," replies Mike.

"How many are there?" shouts Pat.

"About 50,000," says Mike.

"Begorra," shouts Pat, jumping up and grabbing his rifle, "our fortune's made."—Exchange.

**MICHIGAN'S DEPARTMENT
OF HEALTH**

C. C. SLEMONS, M.D., Dr.P.H., Commissioner
LANSING, MICHIGAN

**EDUCATIONAL LITERATURE
ON SYPHILIS AVAILABLE**

In answer to widespread popular interest in the problems of syphilis control, the Michigan Department of Health has reprinted Surgeon General Thomas Parran's article, "Why Don't We Stamp Out Syphilis?" The basic information presented in this article will aid in creating an informed public opinion regarding this problem and insure a more intelligent cooperation with the syphilis control efforts of local health and medical authorities. Copies have been made available for group leaders and others who may influence community thought and action.

"Combating Early Syphilis" is a popularly written article by Dr. John H. Stokes in which he describes for the layman the standard medical procedure in the diagnosis and treatment of early syphilis. Dr. Stokes, of the University of Pennsylvania, is one of the leading syphilologists in the United States and was for many years a special consultant for the U. S. Public Health Service. This article emphasizes the need for early diagnosis of syphilis and the importance of time and treatment in the control of infectiousness. It is most readable and convincing for the patient who does not readily appreciate the absolute necessity for continued medical treatment over a long period of time. This article, too, is available in reprint form and a copy will be sent to physicians along with each positive report from the department laboratories on blood tests for syphilis. Doctors, if they so desire, may give this article to the patient who has syphilis as a supplement to personal advice concerning continued treatment.

Doctors who are being called upon frequently for addresses on syphilis may find occasion to use these pamphlets for supplementary distribution at such group meetings. Both pamphlets will be furnished without charge to doctors in any quantity desired upon request to the Michigan Department of Health.

In addition to these specific articles upon syphilis, the department also has available two pamphlets concerned with the broad, preventive aspects of social hygiene. "Sex Education in the Home" is designed to be of assistance to parents, and "Growing Up in the World Today" will aid boys and girls of high school age who are seeking a scientific solution of their social hygiene problems. These pamphlets may also be secured upon request to the Michigan Department of Health.

**SYPHILIS TESTS RELIABLE
IN MICHIGAN**

Charges appearing in the national press that "ten per cent of the state and private laboratories of this country are making such inaccurate tests for syphilis that they miss one-half of the cases" and that others are "making false positive reports and thereby labeling healthy persons as syphilitic" do not apply to the situation in Michigan, according to State Health Commissioner C. C. Slemons.

"No person need question the reliability of blood tests for syphilis performed by any of the registered laboratories in this state," declares Dr. Slemons.

**TWENTY MILLION
CIGARETTE
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Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245 ☐

Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154 ☐

N.Y. State Jour. Med., June 1935, Vol. 35, No. 11 ☐

Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60 ☐

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"All of the 111 laboratories in Michigan making blood tests for syphilis are required by law to be registered by the Michigan Department of Health and check tested for dependability and sensitivity. The last series of tests performed this year indicated 100 per cent diagnostic agreement. There were no false positives or false negatives recorded in the final tabulation. Such check tests are performed two or three times each year. The quality of service offered by these registered laboratories at present is such that the medical practitioner and the general public need have no fear of obtaining inaccurate reports on specimens submitted for examination."

The three diagnostic laboratories maintained by the Michigan Department of Health at Lansing, Grand Rapids and Houghton are also checked for reliability by the United States Public Health Service. Results of these tests performed during the past two years placed the department diagnostic laboratories among those at the head of the list for dependability, sensitivity and specificity.

Administration of the law requiring registration of all laboratories in this state performing blood tests for syphilis is carried on by the Michigan Department of Health with the aid of an Advisory Committee of Laboratory Directors. Members of this committee include the following: J. F. Norton, Ph.D., Chairman, The Upjohn Company, Kalamazoo; R. L. Kahn, Sc.D., University of Michigan, Ann Arbor; H. E. Cope, M.D., Owen Clinical Laboratories, Detroit; J. A. Kasper, M.D., Herman Kiefer Hospital, Detroit; W. M. German, M.D., Blodgett Memorial Hospital, Grand Rapids; F. W. Hartman, M.D., Henry Ford Hospital, Detroit; S. E. Gould, M.D., Eloise Hospital, Eloise; and Ward Giltner, D.P.H., Michigan State College, East Lansing.

If and when there is a discrepancy in the results reported by any of the laboratories, that laboratory is visited by a staff member of the Michigan Department of Health laboratories or a member of the Advisory Committee of Laboratory Directors and the source of error eliminated. Last year the registered laboratories in Michigan made 363,691 blood tests for syphilis. Of these, 77,550 were made by the three state diagnostic laboratories and 286,141 by laboratories not operated by the Michigan Department of Health.

It must be remembered that this test for syphilis is a biologic test with many variables and it does not have the mathematical accuracy of a chemical test. Particularly in treated cases of syphilis, the reacting substances in the blood stream of the patient vary from day to day. Negative tests on treated cases should be repeated several times in order to determine the serological status of the patient.

MEDICAL SOCIETIES INVITED TO VISIT NEW LABORATORIES

County medical societies are cordially invited to visit the recently completed Diagnostic and Research Laboratories of the Michigan Department of Health at Lansing. The new \$125,000, three-story plant is the central unit of one of the finest laboratory systems maintained by any state health department. Here are performed thousands of diagnostic examinations each week for physicians, health officers and hospitals as well as many other examinations for state and local government agencies. The third floor of the plant has been turned over to the laboratories of the Department of Agriculture, thus centralizing all of the major laboratory activities of the state in one building. Nearby is the Biologic Products Division where all of the depart-

ment's huge output of biologics is developed, produced and distributed.

Department officials will arrange a complete program for county medical societies wishing to hold one of their regular meetings at the new laboratory, and a tour of both the new diagnostic laboratory and the Biologic Products Division should prove of interest. Local secretaries should communicate with Dr. C. C. Slemons, Director of Laboratories, regarding arrangements.

POSTGRADUATE LECTURES IN PEDIATRICS

As a sequel to the postgraduate lectures in obstetrics offered last fall, the Bureau of Child Hygiene and Public Health Nursing sponsored during the month of May a similar series of lectures in pediatrics for physicians at Cadillac, Petoskey, Grayling and Alpena. The course was planned with the coöperation of the Michigan State Medical Society and local societies, the Michigan Branch of the American Academy of Pediatrics and the University of Michigan Department of Postgraduate Medicine.

Lectures the week of May 3 were conducted by Dr. John F. Sander, Lansing pediatricist, on the subject "Contagious Diseases of Childhood." Dr. W. C. C. Cole, Woman's Hospital of Detroit, gave the second series on the "Management of Abnormalities of the Newborn." The week of May 17, Dr. John L. Law, instructor in pediatrics and infectious diseases at the University of Michigan, was secured to discuss "Respiratory Infections Including Pneumonia."

The final lecture, the week of May 24, was arranged by Dr. J. A. Johnston, pediatrician-in-chief at Henry Ford Hospital, Detroit. Dr. Johnston's lecture included "The management of any acute illness with fever; a discussion of changes that occur in the body as a result of infection, fever, fasting, vomiting, diarrhea, and their treatment. Also a simple plan for feeding the normal infant." All of the lectures were available for individual consultation with practitioners who attended.

All of the lectures were preceded by dinner meetings at the various centers. Approximately 200 physicians in the northern part of the state were invited to attend. The pediatrics lectures were a part of the Michigan maternal and child health program under the provisions of the Social Security Act.

SCARLET FEVER AND RUBELLA

The incidence of scarlet fever has, so far in 1937, been approximately three times that for the same period in 1936. Although a part of this increase is due to better reporting in certain areas where full-time health departments have recently been established, there is no doubt that the actual incidence of the disease is considerably higher than it has been for several years.

Death rates, according to early figures, are not high. Most cases run a mild, clinical course.

At the same time, outbreaks of rubella have occurred in a number of communities. Diagnosis between these two diseases is occasionally confusing, and particularly there is apt to be misunderstanding on the part of the public and a failure to call a physician when the case is thought to be "German" measles.

SMALLPOX

The incidence of smallpox has been so low that the public in general and even physicians have come to think that it just doesn't exist. However, early

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in the year there occurred several cases of smallpox in Dundee. From this village the disease has spread throughout most of Monroe County, particularly in the western and southern parts.

A total of 91 cases, all originating from the one source, has been reported during the first four months of the year. Only four of these have occurred outside of Monroe County. The original case was a young man from one of the western states who came home to visit his family during the holidays. A number of the early cases did not have medical attention and the disease smoldered for some time before coming to light.

Cases, with few exceptions, have run a mild, clinical course. A majority have had typical prodromal symptoms; in fact a diagnosis of "flu" was often made, but a few days later a rash appeared.

It is estimated that approximately 50,000 vaccinations have been done in the southeastern part of the state as a result of the presence of smallpox in Monroe County. However, many people especially in other parts of the state remain unvaccinated, and outbreaks of smallpox may occur when least expected.

AUTOMOBILE DEATHS INCREASE 43 PER CENT IN FIRST QUARTER

A total of 429 automobile accident deaths in Michigan during the first three months of the year marks a 43 per cent increase over the same period in 1936 when 301 deaths were recorded, according to the Bureau of Records and Statistics.

Michigan's auto deaths have been climbing for the past several years, but the 1937 increase is the greatest ever reported over a three months period. Unusually favorable driving conditions during January and February probably accounted for much of the rise. The February toll of 121 deaths was 71 per cent above that of last year. January deaths totaled 180 for a 52 per cent increase, with March showing 128 auto deaths, 16 more than in 1936.

There were 8,500 persons reported killed by automobiles throughout the nation during this same period, an increase of 26 per cent over the previous year. Gasoline consumption, usually correlated with the fluctuation in automobile deaths, increased but six per cent during the early months.

NOTED SEMINAR SPEAKERS

Two noted speakers who have been guests of the department at recent seminars are Dr. Thorvald Madsen, director of the Serum Institute of Copenhagen and chairman of the Committee on Biologic Standards of the League of Nations, and Dr. Wilson G. Smillie, Harvard professor of public health administration, who has recently been appointed supervisor of New York's Kips Bay health center.

Dr. Madsen, who is conducting a series of lectures in this country at Vanderbilt University, discussed with the department staff the effectiveness of vaccination against whooping cough and tuberculosis as these measures are being applied in Denmark. Whooping cough vaccination is carried on extensively in Denmark, he said, with considerable success in developing immunity over short periods of time. Dr. Madsen declared that whooping cough vaccination has not yet become a recognized public health activity in this country, such preventive measures being better adapted to administration by the private practitioner. Speaking of tuberculosis vaccination, Dr. Madsen foresaw tremendous possibilities in this field for prevention on the basis of successful experiments in his country. Curiously enough, he explained that only the negative tuberculin reactors were vaccinated, the positive reactors

(Continued on page 424)

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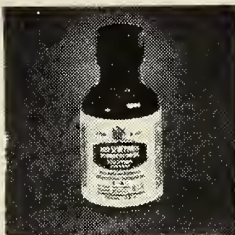
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who did not develop clinical symptoms within a year having already developed an immunity. Dr. Madson also discussed at length the League of Nations' standards for biologic products such as those produced by the Michigan Department of Health.

Dr. Smillie conducted the department seminar on April 23 on the subject of "The Epidemiology of Pneumonia." This discussion was especially appropriate in view of the department's developing program to control the rising death rate from this disease in Michigan.

The Allantoin Treatment of Ulcers

Since the usual type of treatment has been unsatisfactory in many cases of superficial ulcer which often develops into a deep one involving the subcutaneous tissues and even resulting in a periostitis of the underlying bone, Theodore Kaplan, New York (*Journal A. M. A.*, March 20, 1937), suggests the use of allantoin. Since the action of allantoin lasts only as long as the solution is in contact with the wound, it can therefore be easily controlled. Its effect is entirely local and overgrowth of granulation tissue may be readily checked. The speed with which the necrotic base is converted into a granulating area is remarkable. After the first week the wound assumes the appearance of a healthy granulating ulcer, and day by day new islands of granulation tissue can be seen springing up. Pain, which often accompanies these wounds and is a disabling factor, ceases almost immediately with the application of allantoin. Patients are ambulatory under this treatment. It acts locally as long as allantoin is in contact with the wound. Allantoin seems to have the same curative effect on chronic ulcers as the introduction of maggots, and it is less troublesome for the physician to administer and less disturbing to the patient than the use of insects.

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IN MEMORIAM

Dr. John L. Chester

Dr. John L. Chester of Detroit died at his home on May 31, of coronary disease after about two weeks' illness. He was buried on Friday, June 4, at Mount Olivet Cemetery, Detroit. Dr. Chester was born at Le Roy, New York, seventy-two years ago. He received his medical education at the old Saginaw Valley Medical School. He began his practice at Emmett, Michigan, going to Detroit in 1917, where he had practiced for the past twenty years. Up to the time of his last illness, he was chief of the visiting staff and head of the medical department of the Seymour Hospital at Eloise, and was at the time of his death chief-elect of the staff of Providence Hospital, Detroit. Dr. Chester's first wife died two years ago. He is survived by his second wife, Stella M. Chester; one son, Dr. Wm. P. Chester; two daughters, Virginia and Margaret; three sisters, Mrs. James Barrett and Mrs. Bernard Grace of Carson City and Mrs. Charles Rice of Youngstown, Ohio; and one brother, Edward, of Maple Rapids, Michigan. Dr. Chester was known and his passing is regretted by a large circle of friends and numerous patients who knew him as a kind and sympathetic physician. He was a member of the Wayne County Medical Society, the Michigan State Medical Society, and the American Medical Association. Quiet and reserved in manner, Dr. Chester was keenly interested in medical affairs.

Dr. E. A. Runyan

Dr. E. A. Runyan of Flint died at the Hurley Hospital on May 4. Dr. Runyan was a graduate of the University of Michigan Medical School in the class of 1887, and had therefore almost rounded out his half-century of practice. The death of Dr. Runyan removes from the profession a member of the old-type family physician who spared himself not at all in the interests of his patients.

Dr. Runyan is survived by his wife, Nettie, and one son, Russell. Dr. Runyan was for many years a member of the Genesee County Medical Society.

Dr. A. Thuner

Dr. A. Thuner of Detroit died at his home in San Diego, California, May 24, 1937, after a short illness. Dr. Thuner was born in Detroit eighty-three years ago. He was a graduate of the old Detroit College of Medicine and was an honor member of the Wayne County Medical Society. Dr. Thuner practiced in Detroit until 1920, when he retired from practice and moved to California. He is survived by his wife, Imogene, and a daughter, Elsa.

General News and Announcements

The One Hundred Per Cent Club of the Michigan State Medical Society:

1. Alpena County Medical Society.
2. Branch County Medical Society.
3. Cass County Medical Society.
4. Clinton County Medical Society.
5. Eaton County Medical Society.
6. Gogebic County Medical Society.
7. Ingham County Medical Society.
8. Lapeer County Medical Society.
9. Lenawee County Medical Society.
10. Livingston County Medical Society.
11. Luce County Medical Society.
12. Manistee County Medical Society.
13. Menominee County Medical Society.
14. Muskegon County Medical Society.
15. Newaygo County Medical Society.
16. Northern Michigan Medical Society.
17. Oceana County Medical Society.
18. Ontonagon County Medical Society.
19. Schoolcraft County Medical Society.
20. Tuscola County Medical Society.

The above County Medical Societies have paid dues in full for each and every member of the County and State Medical Society. A number of other County Societies lack but a few, sometimes only one or two, of being One Hundred Per Cent. Have YOU paid your dues?

Dr. Robert Breakey, Lansing, addressed the Wexford County Medical Society on Wednesday, April 28, on "Stone in the Urinary Tract."

* * *

The annual spring clinic of the Providence Hospital Interne Alumni Association was held May 12.

* * *

Dr. Gordon Myers, Professor of Medicine at Wayne University College of Medicine, spoke to the Allegan County Medical Society on May 11. His subject was "Diabetes."

* * *

Dr. Roy Waggoner, professor of Psychiatry, University of Michigan, addressed the Jackson County Medical Society, May 18, on the subject, "Epilepsy."

* * *

Dr. Louis J. Bailey has moved to the Professional Building, Detroit, where his practice is limited to internal medicine with special reference to endocrinology.

* * *

Dr. L. Fernald Foster, secretary of the Michigan State Medical Society, addressed the Mt. Clemens Kiwanis Club on May 19. His subject was "The Dangers of Socialized Medicine."

* * *

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Dr. Elliott P. Joslin, Clinical Professor of Medicine at Harvard University Medical School, Boston, will deliver the Andrew P. Biddle Oration this year at the 72nd Annual Convention in Grand Rapids Tuesday evening, September 28.

* * *

Members of the Bay County Medical Society and Bay County Bar Association met on May 19 at the Wenonah Hotel for dinner and a discussion of mutual problems. The meeting was very successful and will aid in ironing out future difficulties.

* * *

Dr. Thomas Parran, Jr., of Washington, D. C., will be a guest speaker at the Michigan State Medical Society Annual Convention on Wednesday evening, September 29. Be sure to be present and hear Doctor Parran, who is Surgeon General of the United States Public Health Service.

* * *

Dr. Maxwell J. Lick, president of the Pennsylvania State Medical Association, will be one of the principal speakers at the annual convention of the Michigan State Medical Society in Grand Rapids on September 28, 1937. Dr. Lick is one of the outstanding orators of the country.

* * *

Twenty-four out-of-state speakers are scheduled to speak at the seven General Assemblies at the 72nd Annual Convention to be held in Grand Rapids next September. Don't miss this exceptional opportunity to attend a postgraduate course at practically no cost to you.

* * *

The beautiful Seaview Golf Club at Atlantic City was the scene of the 23rd Annual Golf Tour-

namment of the American Medical Golfing Association on June 7, 1937. Thirty-six holes of golf were played. One hundred and twenty-nine prizes were awarded.

* * *

Opening for physician in Oceana County. The village of Walkerville, Michigan, situated in a good farming country thirteen miles from the nearest doctor desires to have a resident physician. If you are interested, please drop a note to the Executive Office, 2020 Olds Tower, Lansing.

* * *

A medical supplement will appear with the June 20, 1937, issue of the *Detroit Free Press*, and is sponsored by the Wayne County Medical Society. This is the first complete Medical Supplement sponsored by a County Medical Society in Michigan. Congratulations!

* * *

Get your hotel reservations now. In order to avoid disappointment, hotel reservations should be secured as soon as possible. Hotels which are very close to the Civic Auditorium, where all activities of the Convention will take place, are the Pantlind Hotel, The Morton Hotel, The Rowe Hotel, The Mertens Hotel, and the Browning Hotel, Grand Rapids.

* * *

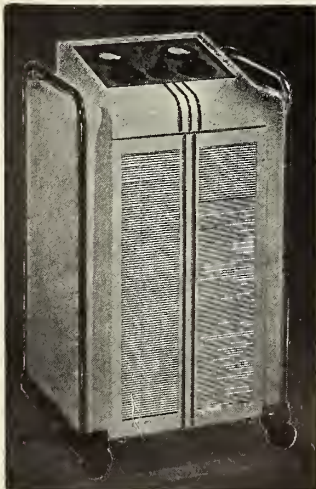
The Oakland County Medical Society sailed (via the D & C) from Detroit to Cleveland on May 4, and enjoyed a clinic at the Cleveland Clinic Hospital on May 5, which ended with a dinner at the Hotel Cleveland at which Dr. George Crile was the honored guest. A goodly number took this unusual excursion and postgraduate "refresher."

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GENERAL NEWS AND ANNOUNCEMENTS

At the annual meeting of the Detroit Dermatological Society held May 5, 1937, the following members were elected to hold office for the ensuing year: President, Dr. George H. Belote, Ann Arbor; president-elect, Dr. G. Warren Hyde, Detroit; secretary-treasurer, Dr. Thomas H. Miller, Detroit, and recorder, Dr. A. E. Schiller, Detroit.

* * *

County Secretaries! Have you sent in the names of your delegates to the annual meeting of the Michigan State Medical Society to be held in Grand Rapids next September? Dr. Frank E. Reeder, Speaker of the House of Delegates, desires to appoint his committees soon and he does not wish to overlook anyone. Please send the name of your delegate at once.

* * *

The Upper Peninsula Medical Society will hold its annual meeting in Houghton, Michigan, on August 19 and 20. All members of the Michigan State Medical Society are cordially invited to attend this annual postgraduate meeting. Many eminent lecturers on scientific papers will be presented. A program of medical economics will be featured on August 19.

* * *

"Weekly refresher courses in Pediatrics" began May 3 in Cadillac, May 4 in Petoskey, May 5 in Grayling, and May 6 in Alpena, and are continuing for fourteen consecutive weeks. The courses are sponsored by the Michigan State Medical Society, Michigan Department of Health, the American Academy of Pediatrics, and the Postgraduate Department of the University of Michigan, and are paid for out of Social Security funds.

Tuesday evening, September 28, 1937, between the hours of 6:00 P. M. and 8:00 P. M. is set aside for alumni banquets, and social occasions of all types, on the occasion of the Annual meeting of the Michigan State Medical Society in Grand Rapids.

Officers of alumni groups, and special societies, are urged to arrange at an early date for dining space in Grand Rapids, to eliminate disappointment at a later date.

* * *

The May issue of THE JOURNAL of the Michigan State Medical Society was sent to every physician in Michigan, which included 3,630 members of the MSMS, and 1,705 non-members, 681 of whom live in Wayne County. If you know a physician who is eligible for membership but who has not affiliated himself with his county medical society, won't you urge him to do so? He needs to be in organized medicine.

* * *

Dr. George Crile, Cleveland, whose subject will be "Comparative Anatomy and Physiology of the Thyroid Gland," Dr. Frank H. Lahey of Boston, who will conduct a Dry Clinic at 11:00 A. M. on June 16; Dr. C. W. Mayo, Rochester, Minn., who will discuss "Malignancy of the Thyroid: Further Observations." Complete programs may be had by writing Dr. W. B. Mosser, Kane, Pennsylvania, Secretary of the American Association for the Study of Goiter.

* * *

The American Association for the Study of Goiter will hold its annual meeting in Detroit at the Book-Cadillac Hotel on June 14, 15, 16, 1937. The scientific sessions are open to members of the medical profession in good standing. There is a registration fee of \$3.00. Many speakers of national

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and international eminence are scheduled for the program. Among them are Dr. Saul Hertz, Boston, whose subject will be "Some Prognostic Criteria in Selection of Cases of Exophthalmic Goiter for Non-Surgical Treatment!"

* * *

The Society of Clinical Surgeons will pay its first visit as a Society to Scandinavia this July. They have invited members of the Interurban Surgical Society, with their families, to join in the tour and will sail July 2 on the S.S. *Gripsholm*. They will visit the outstanding clinics of Denmark, Sweden and Norway, and will combine scientific interest with the recreational and sightseeing features of a holiday abroad, continuing on to England and Scotland before returning to the United States via the S.S. *Caledonia* on August 16. The tour is conducted by Thos. Cook & Sons of New York.

* * *

The American Board of Surgery is now organized and has begun to function. The board will attempt to certify competent surgeons who do general surgery, as well as those who do specialized subdivisions of surgery, except genito-urinary surgery and orthopedic surgery, etc., which have their own boards. The board will hold its first examination (Part I, written) on September 20, 1937. All inquiries concerning applications for this examination should be received by the secretary's office promptly. Requests for booklets of information, application blanks, and other information should be addressed to the secretary, Dr. J. Stewart Rodman, 225 South 15th Street, Philadelphia, Pa.

* * *

The Michigan Crippled Children Commission, in cooperation with the Michigan State Medical Society, the Michigan Orthopedic Society, and the Postgraduate Department of the University of Michigan, sponsored a "refresher" course in Menominee on June 2, 1937. The program was as follows: "The Clinical Use of Protamine Insulin" by Donald Cowan, M.D., Marquette; "Fractures of the Hip, and Fractures in General," by E. R. Elzinga, M.D., Marquette; and "Essentials of a Neurological Examination," by John L. Garvey, M.D., Milwaukee. The clinic was paid for out of Social Security funds.

* * *

"There are doctors in Detroit," says Russell McLaughlin in the *Detroit News*, "to whom a strain is just another strain; whether in the key of F-sharp or in the small of your back. To them, Beethoven and the sacro-iliac are equally uncomplicated. They are adept at telling you to say 'Ah' and they can also sound their 'A's.' The hand that holds the lancet swings the bow. They read orchestral scores as easily as fever charts." He is talking about the Doctors' Symphony Orchestra of Detroit, which is one of the finest musical organizations of its kind in the world. The Detroit Doctors' Symphony Orchestra has been invited to play at the annual convention of Michigan State Medical Society on Wednesday, September 29, 1937, on the occasion of President's Night. Plan now to be present at this worthwhile function.

* * *

The Cosmetology Law (for beauty operators, et cetera) requires each operator to register annually on or before September 1. The registration includes a physical examination by a physician, as well as a recent photograph. The Michigan State Board of Cosmetology, 519 Hollister Bldg., Lan-

JOUR. M.S.M.S.

GENERAL NEWS AND ANNOUNCEMENTS

sing, accepts as proof of good health any examination certificate signed by a registered doctor.

* * *

At a recent meeting of the Executive Committees of the Bay County Medical Society and the Bay City Drug Club numerous matters of mutual interest to our Society and to the druggists were considered. One was the matter of patients prescribing their own medicine. It is the druggists' impression that doctors prescribe to their patients by the drug trade name, thereby educating them to ask for their own medicine.

We wish to remind you that by a resolution a few years ago the Society prohibited the use of labeled samples to patients. *Be sure to remove labels from all samples.*—From *Bulletin to members of Bay County Medical Society*.

* * *

Crippled and Afflicted Child Commitments for April 1937:

Crippled Child: Total of 199. Of the total number, seventy-eight went to University Hospital; and 121 went to miscellaneous hospitals. From Wayne County (included in above totals): Total cases, fifty-five. Of the fifty-five cases in Wayne County, four went to University Hospital and fifty-one went to miscellaneous hospitals.

Afflicted Child: Total of 1,359 cases, of which 246 went to University Hospital and 1,113 went to miscellaneous hospitals. From Wayne County (included in above totals): Total cases, 400. Of the 400 cases in Wayne County, twenty-nine went to University Hospital and 371 went to miscellaneous hospitals.

* * *

Dr. L. J. Garipey of Detroit announces the opening of the new offices of the Detroit Medical, Surgical, and Dental Group on June 1, 1937. The new office building is located at 16401 Grand River Avenue. Comprising the group are: Doctors L. J. Garipey, T. F. Keating, D. R. Herkimer, J. H. Dempster, A. K. Northrop, R. R. Benson, G. E. Hause, and G. D. Peters.

* * *

Dr. James H. Dempster, Editor of THE JOURNAL of the Michigan State Medical Society, has been appointed lecturer on medical writing at the Wayne University College of Medicine. This course is an innovation in medical schools. Dr. Dempster is eminently qualified for this assignment, having very recently written and published "Medical Writing; Some Notes on Its Technic," a 168 page, illustrated, well-bound little volume replete with ideas, experience and wisdom.—*Wayne County Medical News*.

* * *

Dr. Fred G. Novy, dean emeritus and professor emeritus of bacteriology at the University of Michigan, was speaker of the evening at the Wayne County Medical Society on the 17th of May. Dr. Novy gave a very interesting address entitled, "Fifty Years in Retrospect," in which he spoke of the advances made in the science of medicine since he was a young man. Dr. Novy was introduced by Dr. James E. Davis, professor of pathology of Wayne University College of Medicine. After his address, Dr. Novy was presented with a certificate of honorary membership in the society in recognition of his contributions to medical science. Dr. Henry A. Luce, past president of the Wayne County Medical Society, presented Dr. Gruber, the retiring president, with a gold gavel and shield emblem in recognition of his services to the society.

JUNE, 1937

WAYNE UNIVERSITY MEDICAL COLLEGE ALUMNI CLINIC

The annual clinic of the Alumni Association of the Medical College of Wayne University will be held at the Medical College Auditorium, Mullett Street and St. Antoine, Wednesday, June 16, 1937, when the following program will be given.

Morning

- 9:00 to 12:00—Symposium on Biliary Tract Disease. Dr. Frank Lahey, Boston Surgeon, on Common Duct Stones and Strictures of the Common and Hepatic Ducts. Dr. Plinn Morse, Detroit Pathologist, on Ultimate Effects of Jaundice. Dr. Charles G. Johnston, Wayne University Professor of Surgery, on Pre-operative and Post-operative Treatment in Cases of Obstructive Jaundice.

12:30—Complimentary luncheon at the College.

Afternoon

- 1:30 to 2:10—*Department of Pathology*. Subjects for discussion and demonstration:
1. Malignant tumors of the ovary.
2. The pathology of puerperal infection. Dr. James E. Davis, Professor of Pathology, and staff. Demonstrations on the second floor in laboratory and museum, at 1516 St. Antoine Street.
- 2:15 to 2:55—*Department of Anatomy*. Subject: Some Recent Advances in the Physiology of Reproduction. Dr. Warren O. Nelson, Professor of Anatomy, and staff. Exhibition of experimental laboratory, fourth floor, 625 Mullett Street building.
- 3:00 to 3:40—*Department of Surgical Research*. Subject: Discussion and demonstrations of problems under investigation. Dr. Charles G. Johnston, Professor of Surgery, and staff. Demonstrations on third floor, 625 Mullett Street building.
- 3:45 to 4:25—*Department of Physiology*. Subject: Demonstrations in gastric physiology. Dr. Thomas L. Patterson, Professor of Physiology, and staff. Fifth floor laboratory and lecture room, 645 Mullett Street building.

Evening

Class Reunions

Thursday, June 17, 1937
Harper Hospital

Morning

- 9:00 to 12:00—Clinical program by the staff of Harper Hospital.
12:15—Luncheon, guests of Harper Hospital.

Afternoon

Parke-Davis & Co. Laboratories
Foot of McDougall

- 1:15—Visit the Parke-Davis plants at the foot of McDougall Avenue.
2:30 to 6:00—Boat ride on Steamer *Put-in-Bay*. The Annual Meeting of the Alumni Association will be held on the boat. Boat leaves from Parke-Davis wharf.

Evening

Detroit Leland Hotel

- 7:00—The Annual Student Faculty Alumni Dinner.

THE UPPER PENINSULA MEDICAL SOCIETY

The Upper Peninsula Medical Society will hold its fortieth annual meeting in Houghton, Thursday and Friday, August 19-20.

Registration will begin at the Douglass House, Houghton, at 9:00 A. M.

Welcoming address by President Vandeventer will be followed by short talks on state society business and economic subjects, by state society officers, including Dr. Foster, Dr. Perry, Dr. Cook, Dr. Urmston, and Mr. Burns. Luncheon at the Douglass House will be devoted to discussion and questions.

The scientific sessions will start at 1:30 P. M.

1:30 P. M. Dr. Herman L. Kretschmer—"Personal Experiences in the Treatment of Bladder Neck Obstructions by Means of Transurethral Electro-Resection." (A Review of 1,000 Cases.)

2:00 P. M. Dr. D. L. Cleveland, Milwaukee—"Late Results of Intra-Cranial Brain Trauma."

2:30 P. M. Dr. Michael L. Mason, Chicago—"The Management of Felon, Tenosynovitis, and Acute Spreading Infection of the Hand."

3:00 P. M. Recess to inspect scientific exhibits.

3:15 P. M. Dr. John D. Steele, Ann Arbor—"The Treatment of Empyema."

3:45 P. M. Drs. Lundy and Adams, Rochester—"Methods of Anesthesia, and a Method of Blood Transfusion for the General Practitioner."

4:15 P. M. Dr. Henry K. Ransome, Ann Arbor—"Acute Surgical Lesions of the Abdomen."

4:45 P. M. Dr. Avery D. Prangen, Rochester—"Early Treatment of Strabismus as Related to the General Practitioner."

Friday, August 20

9:30 A. M. Dr. Frank N. Wilson, Ann Arbor—"Coronary Thrombosis."

10:30 A. M. Recess.

10:45 A. M. Dr. Howard Cummings, Ann Arbor—"The Importance of Examinations of the Cervix Uteri."

11:15 A. M. Dr. G. de Takats, Chicago—"Vascular Accidents of the Extremities."

11:45 A. M. Dr. Vernon L. Hart, Minneapolis—"Orthopedic Surgery."

A banquet will be served at the Douglass House at 7:00 P. M. Thursday, followed by dancing at the Onigaming Club for those who wish.

Friday afternoon will be devoted to recreation. Golf may be played at the Portage Lake Club, or at the Keweenaw Golf Club for those making the drive to Keweenaw. A tournament will be held at the Portage Lake Club.

Swimming or boating may be enjoyed, or a fishing trip might be arranged. Transportation will be available for anyone wishing to make the mountain drive into Keweenaw. For anyone wishing to visit Isle Royale, we suggest planning on spending the week-end in Houghton, and contacting the chairman of the Arrangements Committee, Dr. L. S. Leo, as to available transportation.

The ladies will register at the Douglass House, Houghton. A bridge luncheon will be held at 1:00 P. M. Thursday, at the Onigaming Club, and on Friday the ladies will drive to Copper Harbor and lunch at the Keweenaw Golf Club.

A general invitation is hereby extended to our colleagues in the Lower Peninsula to come to Houghton for an interesting and instructive scientific program as well as a vacation trip you will remember for years.

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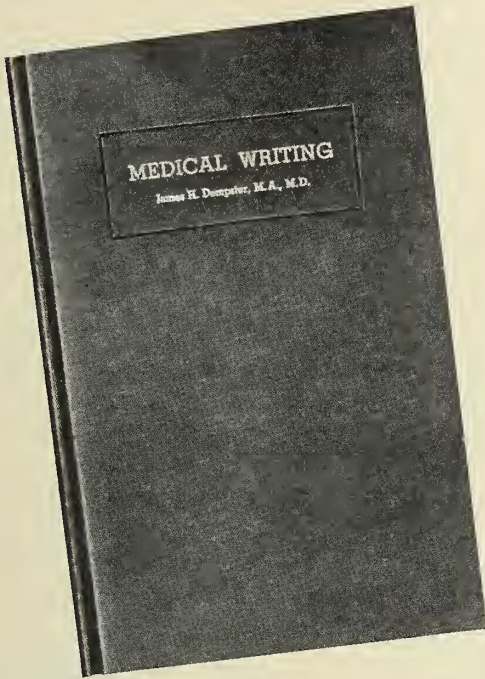
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James H. Dempster, M.A., M.D.

Editor of The Journal of the Michigan
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Medical Writing, College of Medicine,
Wayne University

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Among Our Contributors

Dr. Neil Bentley received his A.B. and M.D. degrees from the University of Michigan. He followed this with two years of postgraduate work in Eye, Ear, Nose and Throat, part of this time being spent in Vienna and London. He began his practice in Detroit in 1908. He is attending Oto-Laryngologist and Ophthalmologist and Director of the Polyclinic at Grace Hospital, Detroit. He is also consulting Ophthalmologist and Oto-Laryngologist of Highland Park General Hospital, Highland Park, Michigan.

* * *

Dr. James D. Bruce is a graduate of the Wayne University College of Medicine in the class of 1896. He was a member of the Council of the State Medical Society for twelve years. He occupied the chair of Internal Medicine in the University of Michigan Medical School from 1925 to 1928. Upon the establishment of the Department of Postgraduate Medicine in 1928, he took over the directorship, which position he now holds. He is also chairman of the Division of the Health Sciences, of the Division of the Extra-Mural Services, and Vice President of the University. He served as Governor for Michigan for the American College of Physicians from 1930 to 1936, when he was appointed Regent of the College.

* * *

Dr. G. Warren Hyde obtained the degree of M.D. at the University of Michigan in 1925. He interned at Harper Hospital in 1925-26. Dr. Hyde received

his post-graduate work in Dermatology and Syphilology at the Buffalo City Hospital, Buffalo, N. Y., 1926-28. He is a member of the Attending Out-Patient Staff on Dermatology and Syphilology at Harper and Shurly Hospitals, Detroit, Michigan.

* * *

Dr. William E. Keane was graduated from the Detroit College of Medicine and Surgery in 1902. He is professor of Urology, Wayne University College of Medicine, and Extramural Lecturer in Urology, University of Michigan. He is also urologist at Providence and Receiving Hospitals, Detroit, and consulting Urologist, Deaconess Hospital, Detroit.

* * *

Dr. Samuel J. Levin obtained the Degree of M.D. at the University of Toronto, 1923. He was Interne and Resident, Department of Pediatrics and Allergy, University of Michigan Hospital, 1923-1925; Pediatric Resident Mount Sinai Hospital, New York, 1925-1926; Instructor, University of Michigan 1926-1927; Instructor, Wayne University, since 1927.

* * *

Dr. John S. Lundy was graduated B.A. in 1917 from the University of North Dakota, and M.D. in 1920 from Rush Medical College, University of Chicago. He is head of the Section on Anesthesia, The Mayo Clinic, Professor of Anesthesia, The Mayo Foundation for Medical Education and Research, and the Graduate School, University of Minnesota.

The Forty-Eighth Annual

DETROIT CLINICS

sponsored by the Alumni Association of the Wayne University College of Medicine

WEDNESDAY, JUNE 16

*College Auditorium
Mullet and St. Antoine*

9:00 a. m.—Symposium on Liver Disease by
Dr. Plinn F. Morse
Dr. Frank H. Lahey
Dr. Charles G. Johnston

12:30 p. m.—Luncheon

1:30 p. m.—The Faculty Program, by
Dr. James E. Davis
Dr. Warren O. Nelson
Dr. Charles G. Johnston
Dr. Thomas L. Patterson

THURSDAY, JUNE 17

Harper Hospital

9:00 a. m.—Clinical Program

12:15 p. m.—Luncheon

Parke, Davis & Co.

1:30 p. m.—The Boat Ride
The Annual Meeting

Detroit-Leland Hotel

7:00 p. m.—The Annual Dinner

AMONG OUR CONTRIBUTORS

Dr. L. Orecklin is a graduate of the University of Toronto Medical School, 1923. He served his internship at Providence Hospital, Detroit, 1923-24. He is on the Dermatological Staff of the North End Clinic, Detroit. His practice is limited to Dermatology.

* * *

Dr. Edward B. Tuohy received his M.D. degree from the University of Pennsylvania in 1932 and M.S. in Anesthesia from the University of Minnesota in 1936. He is Acting Consulting Physician in the Section on Anesthesia at the Mayo Clinic.

RELISHED BY THE WISEST MEN

Beware of the person who tries to rush you into a decision, usually he is afraid to give you time to study the proposition.

* * *

Man—That man Fiddler can talk by the hour on capital and labor.

Friend—That's strange. He has no personal acquaintance with either.

* * *

"A loafer who loafs around loafers is not as bad as the loafer who loafs around busy men."

* * *

The foreman of an electrical repair shop was interviewing a bright boy who was applying for a position.

"Do you know anything at all about electrical apparatus?" asked the foreman.

"Yes, sir," was the prompt reply.

"What is an armature?" asked the foreman.

"It's a fellow that sings for Major Bowes."—Edmonton *Bulletin*.

Tommy came out of a room in which his father was tacking down a carpet. He was crying lustily. "Why, Tommy, what's the matter?" asked his mother.

"P-p-p-papa hit his finger with a hammer," sobbed Tommy.

"Well, you needn't cry at a thing like that," comforted his mother. "Why didn't you laugh?"

"I did," sobbed Tommy.—*Western Retailer*.

* * *

Too many of us are inclined to be more interested in having evils remedied in our particular way than we are in merely having them remedied.

* * *

"Who was that pretty little thing I saw you with last night?"

"Will you promise not to tell my wife?"

"Surely, I promise."

"Well, it was my wife."—*Dagens Nyheter (Stockholm)*.

* * *

He—You didn't notice me last night, and I saw you twice.

She—I never notice people in that condition.

* * *

Uncle Fred asked Little Cecelia if she didn't want him to play with her.

"Oh, no," she said, "we're playing Indian, and you're no use, 'cause you're scalped already."

Takes It Straight

Sandy: Jock, why dae ye always haud yer nose when ye tak a drink o' whiskey?

Jock: The smell o' guid whiskey always maks my mouth water and I want to tak the whiskey clear.

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Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

SYNOPSIS OF PEDIATRICS. By John Zahorsky, A.B., M.D., F.A.C.P., Professor of Pediatrics and Director of the Department of Pediatrics, St. Louis University School of Medicine, and Pediatrician-in-Chief to the St. Mary's Group of Hospitals; Fellow of the American Academy of Pediatrics. Assisted by T. S. Zahorsky, B.S., M.D., Instructor in Pediatrics, St. Louis University School of Medicine, and Assistant Pediatrician to the St. Mary's Group of Hospitals. Second Edition, St. Louis, The C. V. Mosby Company, 1937. Price, \$4.00.

MEDICAL UROLOGY. By Irvin S. Koll, B.S., M.D., F.A.C.S., Attending Urologist, Michael Reese Hospital. With 92 Text Illustrations and 6 Color Plates. St. Louis, The C. V. Mosby Company, 1937. Price, \$5.00.

SURGICAL PATHOLOGY OF THE THYROID GLAND. By Arthur E. Hertzler, M.D., Surgeon to the Agnes Hertzler Memorial Hospital, Halstead, Kansas, Professor of Surgery, University of Kansas. With 238 Illustrations. Philadelphia, Montreal and London, J. B. Lippincott Company, 1936.

HANDBOOK OF ORTHOPAEDIC SURGERY. By Alfred Rives Shands, Jr., B.A., M.D., Associate Professor of Surgery in Charge of Orthopaedic Surgery, Duke University School of Medicine, and Chief of the Orthopaedic Service, Duke Hospital, Durham, North Carolina; Member of the American Orthopaedic Association, the American Academy of Orthopaedic Surgeons, and the International Society of Orthopaedic Surgery. In Collaboration with Richard Beverly Raney, B.A., M.D., Instructor in Orthopaedic Surgery, Duke University School of Medicine. With 169 Illustrations. St. Louis, The C. V. Mosby Company, 1937. Price, \$5.00.

DIABETES: A MODERN MANUAL. By Anthony M. Sindoni, Jr., M.D., Chief of the Diseases of Metabolism at the St. Agnes Hospital; Chief Consultant in the Diseases of Metabolism at the Oncologic Hospital; Physician to the Medical Dispensary of Presbyterian Hospital, Philadelphia. Introduction by Morris Fishbein, B.S., M.D., Editor, Journal of the American Medical Association. With a foreword by George Morris Piersol, B.S., M.D., Professor of Medicine, Graduate School of Medicine, University of Pennsylvania; Physician to the Graduate School Hospital; Active Medical Consultant to the Philadelphia General Hospital, Philadelphia; Physician-in-Chief to the Abington Memorial Hospital, Abington, Pa. New York and London, McGraw-Hill Book Company, Inc., 1937. Price, \$2.00.

SENILE CATARACT: METHODS OF OPERATING. Third revised edition. By W. A. Fisher, M.D., F.A.C.S., Chicago, Ill., Professor of Ophthalmology, Chicago Eye, Ear, Nose and Throat College. With chapters by Prof. E. Fuchs, Vienna, Austria, Prof. I. Barakuer, Barcelona, Spain, Dr. H. T. Holland, Shikarpur, Sind, India, Dr. John Westley Wright, Columbus, Ohio, Dr. A. Van Lint, Brussels, Belgium. With 150 pages and 181 illustrations. Published by the H. G. Adair Printing Co., Chicago, Illinois, 1937. Price \$2.00.

OPHTHALMOSCOPY, RETINOSCOPY AND REFRACTION. With a new chapter on Orthoptics. By W. A. Fisher, M.D., F.A.C.S., Chicago, Ill., Professor of Ophthalmology, Chicago Eye, Ear, Nose and Throat

College, Fourth Revised Edition, with 240 illustrations, including 24 colored plates. Chicago, H. G. Adair Ptg. Co., 1937. Price, \$2.00.

THE OCULAR FUNDUS IN DIAGNOSIS AND TREATMENT. By Donald T. Atkinson, M.D., F.A.C.S., Consulting Ophthalmologist to the Santa Rosa Infirmary and the Nix Hospital, San Antonio, Texas; Fellow of the American Academy of Ophthalmology and Otolaryngology; Life member of the American Medical Association of Vienna; author of "External Diseases of the Eye." With 106 illustrations including 58 colored plates. Lea & Febiger, Philadelphia, 1937. Price, \$10.00.

MEMORANDA OF TOXICOLOGY. By Max Trumper, B.S., A.M., Ph.D., Consulting Clinical Chemist and Toxicologist. Member United States Advisory Board on Hazardous Occupations for Minors. Formerly Lecturer on Toxicology, Jefferson Medical College, Philadelphia, Penna. Third edition. Philadelphia: P. Blakiston's Son & Co., Inc., 1012 Walnut Street, 1937.

This is a convenient and authoritative manual on the subject.

SURGICAL TREATMENT. By James Peter Warbasse, M.D., F.A.C.S., Special Lecturer in the Long Island Medical College, formerly Attending Surgeon to the Methodist Episcopal and the Wyckoff Heights Hospitals, Brooklyn, N. Y.; and Calvin Mason Smyth, Jr., B.S., M.D., F.A.C.S., Assistant Professor of Surgery in the University of Pennsylvania, Graduate School of Medicine; Surgeon-in-chief to the Methodist Episcopal Hospital, Philadelphia, Pa.; Visiting Surgeon to the Abington Memorial Hospital, Abington, Pa. Second edition, thoroughly revised and reset. 3 volumes with separate index. 2617 pages with 2486 illustrations on 2237 figures, some in colors. Philadelphia and London: W. B. Saunders Company, 1937. Cloth, \$35.00 net.

Surgeons everywhere are familiar with the first edition of this work. It is dedicated to those who suffer from surgical diseases and injuries which the authors wish understood to mean that the interest of the patient is the supreme consideration. Sometimes what may be a surgical disease may be benefited by non-surgical procedure, hence the emphasis on such physical agents as heat, light, electricity, x-rays and radium. While the general plan of the first edition remains unchanged, every section has been revised and many of them enlarged. In diseases of the thyroid gland, sometimes the combined efforts of surgeon, internist and radiologist are indicated. The authors, therefore, discuss each method of treatment separately and in combination. Seventy-five pages are devoted to a discussion of the recent advances in anesthesia. The treatment of fractures always is a most important subject. To quote from the preface, "Newer methods and the apparatus required for their execution have been described and discussed, but for every fracture at least one method has been given in detail which may be carried out by any doctor under any and all conditions."

To quote the senior author: "Surgery is an art based upon a complex of sciences. It is always in a developmental stage. The hope of surgery like all learning lies in emancipation from the thralldom of authority." This bit of philosophy could be applied to all disciplines. No treatise can relieve the surgeon of the necessity of exercising individual judgment.

The work is well illustrated and splendidly indexed. The index comprises a separate volume of 129 pages. Surgical Treatment is commended for its thoroughness in clarifying a big subject.

COUNTY SOCIETIES

BRANCHES OF THE MICHIGAN STATE MEDICAL SOCIETY

COUNTY SOCIETY	PRESIDENT	SECRETARY	MEETINGS	
			Regular	Annual
Allegan	G. H. RIGTERINK Hamilton	M. B. BECKETT Allegan	1st Tuesday	1st Tuesday December
Alpena-Alcona- Presque Isle.....	DR. C. A. CARPENTER Onaway	HAROLD KESSLER Alpena	Last Thursday 6:00 p. m.	Last Thursday December
Barry	H. S. WEDEL Freeport	G. F. FISHER Hastings	2nd Thursday 8:00 p. m.	1st Thursday January
Bay-Arenac-Iosco- Gladwin	DR. A. D. ALLEN Bay City	A. L. ZILIAK Bay City	2nd and 4th Wednesday (ex- cept July, Aug., Sept.) 6:00 p. m.	2nd Wednesday December
Berrien	C. S. EMERY St. Joseph	A. F. BLIESMER St. Joseph	2nd Wednesday or Thursday	2nd Wednesday or Thursday, December
Branch	BERT W. CULVER Coldwater	F. S. LEEDER Coldwater	3rd Thursday 6:30 p.m.	3rd Thursday December
Calhoun	C. W. BRAINARD Battle Creek	WILFRID HAUGHEY Battle Creek	1st Tuesday (except July and Aug.)	1st Tuesday December
Cass	S. E. BRYANT Dowagiac	K. C. PIERCE Dowagiac	2nd Wednesday or Thursday	December 15
Chippewa- Mackinac	F. J. MOLONEY Sault Ste. Marie	GEO. A. CONRAD Sault Ste. Marie	1st Friday	1st Friday December
Clinton	A. C. HENTHORN St. Johns	T. Y. HO St. Johns	1st Tuesday 7:30 p. m.	1st Tuesday October
Delta	H. O. GROOS Escanaba	NATHAN J. FRENN Bark River	1st Thursday 8:30 p.m.	December 2
Dickinson-Iron	D. R. SMITH Iron Mountain	W. H. HURON Iron Mountain	1st Thursday 6:30 p. m.	1st Thursday December
Eaton	H. A. MOYER Eaton Rapids	THOMAS WILENSKY Eaton Rapids	Last Thursday	No set date
Genesee	ALVIN N. THOMPSON Flint	C. W. COLWELL Flint	2nd and 4th Tuesday (except July and August)	2nd Tuesday November
Gogebic	C. C. URQUHART Ironwood	F. L. S. REYNOLDS Ironwood	3rd Tuesday	3rd Tuesday December
Grand Traverse- Leelanau-Benzie ..	DWIGHT GOODRICH Traverse City	E. F. SLADEK Traverse City	1st Tuesday 8:00 p. m.	1st Tuesday December
Grafton-Isabella- Clare	KENNETH P. WOLFE Breckenridge	RICHARD L. WAGGONER St. Louis	3rd Thursday	3rd Thursday December
Hillsdale	LUTHER W. DAY Jonesville	E. G. MCGAVRAN Hillsdale	1st Tuesday	1st Tuesday January
Houghton-Baraga- Keweenaw	L. E. COFFIN Painesdale	C. A. COOPER Hancock	1st Tuesday	1st Tuesday January
Huron-Sanilac	F. O. KIRKER Sandusky	E. W. BLANCHARD Deckerville	2nd Thursday	2nd Thursday December
Ingham	MILTON SHAW Lansing	R. J. HIMMELBERGER Lansing	3rd Tuesday 6:30 p. m.	3rd Tuesday December
Ionia-Montcalm	A. I. LAUGHLIN Clarksville	JOHN J. McCANN Ionia	2nd Tuesday 7:00 p. m.	2nd Tuesday December
Jackson	E. D. CROWLEY Jackson	H. W. PORTER Jackson	3rd Tuesday 6:30 p. m.	3rd Tuesday December
Kalamazoo- Van Buren	W. G. HOEBEKE Kalamazoo	L. W. GERSTNER Kalamazoo	3rd Tuesday 7:30 p. m.	3rd Tuesday December
Kent	A. B. SMITH Grand Rapids	J. M. WHALEN Grand Rapids	2nd and 4th Wednesday 8:15 p. m.	2nd Wednesday December
Lapeer	H. M. BEST Lapeer	CLARK DORLAND Lapeer	2nd Thursday	December or January
Lenawee	A. W. CHASE Adrian	ESLI T. MORDEN Adrian	3rd Tuesday	3rd Tuesday December
Livingston	H. L. SIGLER Howell	DUNCAN C. STEPHENS Howell	1st Friday 6:30 p. m.	1st Friday December
Luce	GEO. F. SWANSON Newberry	A. T. REHN Newberry	1st Tuesday 8:00 p. m.	1st Tuesday December
Macomb	JOSEPH N. SCHER Mt. Clemens	R. F. SALOT Mt. Clemens	1st Monday 12:00 noon	1st Monday December
Manistee	KATHRYN BRYAN Manistee	C. L. GRANT Manistee	Every Monday noon	3rd Thursday January
Marquette-Alger	E. R. ELZINGA Marquette	D. P. HORNBOKEN Marquette	No set date	December
Mason	W. S. MARTIN Ludington	CHAS. A. PAUKSTIS Ludington	No set time	No set time
Mecosta-Osceola ...	THOMAS P. TREYNOR Big Rapids	GLENN GRIEVE Big Rapids	2nd Tuesday	2nd Tuesday December

Scopolamine-Morphine Seminarsis With Modifications

O. S. Krebs, G. L. Wulff, Jr., and Helman C. Wassermann, St. Louis (*Journal A. M. A.*, Nov. 21, 1936), use scopolamine-morphine seminarsis as a first stage measure and begin it when the patient is in active labor, usually determined by an obliterating cervical canal. In the hands of the less experienced it may best be started when the uterine contractions are strong and occur at regular intervals and usually when there is at least two fingers' dilatation in the primiparous patient. In the multiparas, the procedure is usually begun with the first regular contractions that are painful. The initial injection contains morphine one-sixth grain (dilaudid hydrochloride at times), and scopolamine hydrobromide 1/133 grain (0.5 mg.), the former never being repeated. Forty-five minutes should elapse between the first and second and the second and third injections, and from that point on the dosage is determined by the patient's loss of coordination and depth of seminarsis. When the seminarsis is intensified to general anesthesia by a general anesthetic at the time of delivery, great care must be exercised to prevent the giving of too much anesthetic. Morphine seminarsis is most applicable during the first stage of labor, particularly in the primiparous patient or in the multiparous patient in whom previous repair work has been done on the cervix, or in whom the first stage is protracted and painful because of premature rupture of the membranes or a long rigid cervix. The disadvantages of scopolamine-morphine seminarsis are chiefly from the standpoint of the attendants. Some one must be constantly with the patient, particularly the one who is supervising the injections. The other disadvantage is the not infrequent restlessness and occasional excitability of the patient. That is, however, by no means striking. It has no effect on the patient herself but at times is quite taxing to the attendant. In the last few years, with the increasing popularity of the barbituric acid derivatives, various of these preparations have been used with scopolamine hydrobromide and morphine usually preceding the latter drugs in administration. In a series of 4,000 cases, the corrected mortality without scopolamine hydrobromide was 2.5 per cent, with scopolamine hydrobromide and opiates 1.8 per cent, scopolamine hydrobromide with all drugs 1.5 per cent and scopolamine hydrobromide with barbiturates 0.3 per cent.

Etiology of Cancer

Lloyd F. Craver, New York (*Journal A. M. A.*, Dec. 7, 1935), confines his discussion of the etiology of cancer to a consideration of those extraneous factors which may act on cells and tissues in such a way as to produce cancer. The multiplicity of the cancer process is indicated not only by its widely varying forms but also by the great number of factors that have already been discovered to be capable of affecting tissues, apparently previously normal or predisposed by some anatomic variation, and inciting them to form malignant tumors. Cohnheim's theory accounts for the source of certain tumors, but the great majority may be attributed to the effects of chronic irritation on adult tissues. That cancer in man is not a germ or virus disease is the accepted belief of all competent students of the problem. That diet has any general relation to the etiology of cancer may safely be denied, nor does it appear likely that the excess or deficiency of any one chemical substance, hormone, or vitamin will be found to be a universal "cause of cancer."

Syphilis probably does not foster the development of cancer in any general sense but only in certain locations, such as the tongue, where syphilitic glossitis and leukoplakia may form the basis for multiple carcinomas. Tuberculosis was formerly believed to offer a certain antagonism to cancer. Yet there is a good percentage of cases of epithelioma on the basis of lupus, and cancer of the lung may develop in the walls of tuberculous cavities. Tuberculosis is a fairly common complication in cancer patients. Ewing has reaffirmed the teaching that a single trauma of normal tissues is incapable of producing a malignant tumor. He grants that trauma may be an important indirect determining cause of certain tumors but in such cases that additional factors, such as delayed healing, infection, chronic irritation and probably hereditary and local predisposition, are at work. The production of tumors in experimental animals by trauma occurs only under special conditions of inherited or induced susceptibility, quite without parallel in man. Strict adherence to the criteria emphasized by Ewing successfully nullifies practically all claims of traumatic cancer in man. Age and sex, heredity, irritants and the relation of tar derivatives to hormones and sterols are discussed in relation to cancer, and under miscellaneous data abnormalities of the skin (pigmented moles, oily or dry skin, sebaceous cysts, scars of lupus or burns) and various conditions of other organs that may lead to cancer are mentioned.

The Small Intestine

Eugene P. Pendergrass, Philadelphia (*Journal A. M. A.*, Dec. 5, 1936), points out that relatively little investigative work has been done on the small intestine by roentgenologists, and because of this the interpretation of its lesions is much more difficult than of other portions of the gastro-intestinal tract. Consequently, only obvious lesions have been diagnosed. It is essential that collective studies be made of the small intestine in healthy individuals and in patients having lesions of the small intestine. Lesions involving other portions of the gastrointestinal tract as well as conditions outside of it may exert a profound influence on the mechanics and pattern of the small intestine. Any investigation, therefore, should include a careful consideration of all such factors. A standard meal is suggested, so that one roentgenologist may compare his results with those of another. The pattern of the small intestine will vary considerably, depending on the composition of the food stuff it receives. It varies also with the consistency of the meal, its size, the gastric emptying time and the tonicity of the intestinal tract. Certain pathologic conditions which only indirectly affect the intestinal tract may cause a very profound change in the small intestine pattern. The meal that the author uses consists of 5 ounces (140 gm.) of barium sulfate and 5 ounces (150 c.c.) of water. Such a meal has the consistency of a thick pabulum but allows excellent visualization of the mucosal pattern. The small intestine not only plays a major rôle in preparing foodstuffs for digestion but it is also the portion of the gastrointestinal tract which is most active in the absorption of the products of digestion. The examination of the small intestine requires several hours as a rule, and occasionally its physiologic function has been disturbed as a result of the patient having developed a headache because of food being withheld. What part psychic or emotional disturbances may take in influencing the motility and pattern of the small intestine is not known but there is reason to believe that fear is occasionally a potent factor.

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ROENTGENOLOGIC DISTINCTION OF BENIGN FROM MALIGNANT ULCERATING LESIONS OF THE STOMACH*

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In the developmental period of gastro-intestinal roentgenology it was necessary to rely almost wholly on clinical data for specific identification of gastric lesions, and often dependence was placed on clinical facts to distinguish between normal and diseased states. Even today the combined clinico-roentgenologic approach is common abroad, but in this country clinicians and roentgenologists have found it advantageous to make their initial examinations independently and to correlate their respective data subsequently. By this initial independence and the constant endeavor to make complete diagnoses on the morphology of lesions as depicted by roentgen rays, marked progress has been achieved. Applied in this manner the roentgenologic examination becomes truly a study of the gross anatomy and pathology of living tissues. Often, moreover, the morbid anatomy is accentuated or supplemented by functional changes which make it possible to determine the character of lesions more readily than by macroscopic inspection of the tissues after excision. Accordingly, I shall review certain purely roentgenologic criteria which aid in distinguishing benign from malignant ulcerous lesions of the stomach, try to appraise fairly their degree of reliability and likewise point out their limitations.

Before considering them in detail, however, I wish again to insist that elicitation of these indexes, many of which cannot be seen in the filled stomach or in ordinary roentgenograms, requires thorough roentgenoscopic examination and attentive study

of the gastric mucosal relief. To exhibit the latter adequately it is necessary to distribute a thin coating of barium over the mucosa when the first swallows of the mixture are taken. The method was used long ago by Holzknecht, later by Carman, and has been followed consistently by the latter's successors and many others. In recent years European roentgenologists have amplified the procedure by making roentgenograms of lesion-bearing areas after roentgenoscopic localization. This is desirable for purposes of record, but the diagnosis is essentially roentgenoscopic.

Benign Gastric Ulcer

With the technic described, a striking characteristic of simple gastric ulcer is an accentuation of the rugæ in the vicinity of the ulcer and their tendency to converge toward its site. The resulting stellate or puckered appearance of the affected area is often the first clue to the presence of the ulcer. At this time the barium-filled crater may also be recognizable, and, especially

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after the stomach is filled, it is evident that the niche projects into the wall of the stomach beyond the normal confines of the gastric lumen. Usually the shadow of the

nign ulcer, often contrasts strongly with the latter roentgenologically. Its niche, like that of simple ulcer, is sculptured in the wall of the stomach and thus extends be-



Fig. 1a. Niche of a benign ulcer on lesser curvature just above the incisura angularis, and showing also antral spasm; there was definite tenderness over the ulcer during fluoroscopic manipulations; *b*, large ulcer on lesser curvature with marked prepyloric spasm and shortening of the lesser curvature (snail stomach); these characteristics together with marked tenderness indicate a benign ulcer, and *c*, niche of a benign ulcer high on lesser curvature with "B-type" hour-glass deformity.

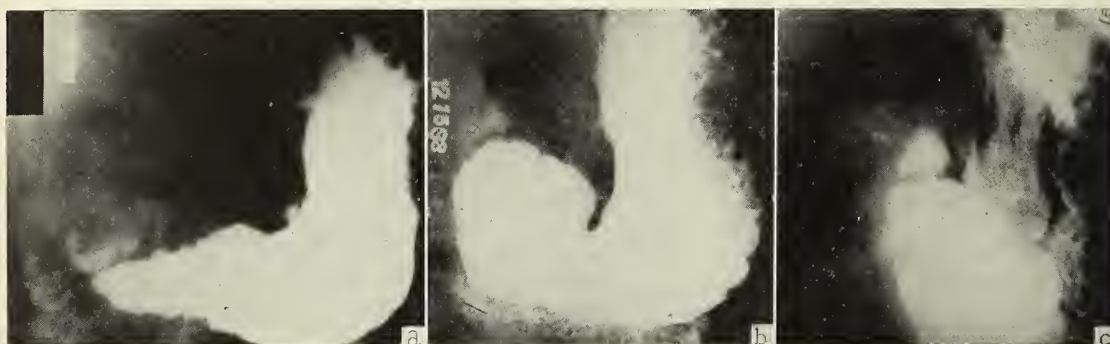


Fig. 2a. Small, hazily depicted malignant ulcer on lesser curvature; note absence of spastic manifestations; *b*, large, shallow, irregular ulcer high on lesser curvature with absence of gastropasm and no tenderness; all these factors strongly suggest malignancy, and *c*, same case as *b* after eleven days hospitalization and rigid ulcer management; the niche has diminished but the roentgenologic appearance and absence of tenderness point to malignancy. At operation a few days later a malignant ulcer was found.

niche is dense, clearly outlined, smoothly rounded and moderate in size, with a diameter of 0.5 to 2 cm. Especially distinctive of benign ulcer is its common accompaniment by some form of gastropasm, such as curling of the antrum toward the lesser curvature, narrowing of the antrum, spastic retention, a tightly closed pylorus, or, exceptionally, an incisura in the plane of the ulcer (Fig. 1a, *b* and *c*). In keeping with the increased irritability, peristalsis is likely to be active. Finally the ulcer is often definitely tender to pressure.

Malignant Gastric Ulcer

In most of the foregoing respects malignant ulcer, a lesion which is morphologically an ulcer rather than an ulcerating tumor and frequently indistinguishable from be-

yond the normal boundary of the lumen, but often it is irregular, or hazily depicted (Fig. 2a, *b* and *c*). The rugæ about it are likely to be indistinct or obliterated, and they are almost never accentuated or convergent.

As a rule, spastic manifestations are absent. Peristaltic activity is usually diminished. Rarely is the ulcer tender to pressure. Malignant ulcers tend to attain greater dimensions than simple ulcers, and it is an accepted maxim that ulcers with a diameter exceeding 2.5 cm. are most often malignant. Another feature which may have more or less significance as to the probable malignancy of an ulcer is its situation. Ulcers on the greater curvature are almost invariably malignant, and those on the posterior wall or near the pylorus are

more likely to be malignant than those on or near the lesser curvature and well removed from the pylorus.

It has long been held that perforated

in combination, is infallible (Table 1). Hence, the character of every ulcer constitutes a diagnostic problem, the solution of which requires active and thorough co-

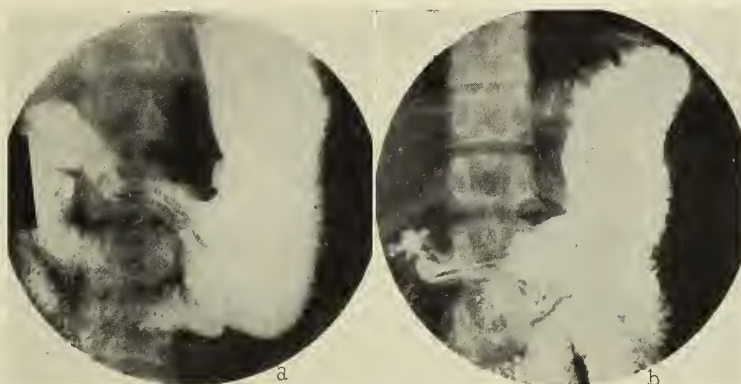


Fig. 3a. Rather large, flat and faintly depicted niche of an ulcer on the lesser curvature, without gastrospasm, which characteristics suggest malignancy although the clinical data together with the fact that the patient was quite tender over the ulcer suggested benignancy; there is also a duodenal ulcer as is shown by the bulbar deformity; b, same case as in a a month after rigid ulcer management; the ulcer has almost disappeared and was entirely healed two weeks later.

ulcers which have formed an accessory pocket outside the stomach are invariably benign. It is true that when the accessory pocket is round or ovoid, as it is in most instances, the lesion is almost certainly benign, but when the pocket is irregularly shaped the process may prove to be carcinomatous.

On the basis of such indexes, malignant ulcers can be distinguished from the benign variety in the majority of cases, but not in all, for none of the signs, singly or

operation between roentgenologist and clinician. The clinical history, analysis of gastric content and many lesser subjective and objective manifestations should be weighed carefully, and the slightest roentgenologic sign of malignancy should be heeded. If the respective examinations yield discordant results, reëxamination should not be omitted. As a final test, observation of the effect of medical management may be necessary (Fig. 3a and b, and 2b and c). Even the results of this test, however, may

TABLE 1. ROENTGENOLOGIC CRITERIA OF BENIGN AND MALIGNANT GASTRIC TUMORS

Benign	Malignant
Niche usually less than 2 cm. in diameter	A niche exceeding 2.5 cm. in diameter strongly suggests malignancy
Niche regularly hemispherical; dense; margins sharply defined	Niche often irregular; faint; margins poorly defined
Ulcers on lesser curvature, not near pylorus	Ulcers on greater curvature almost invariably malignant Ulcers on posterior wall likely to be malignant Ulcers near pylorus open to suspicion
Gastric peristalsis likely to be active	Peristalsis often diminished or absent
Spastic manifestations common: Narrowing of antrum Curling of antrum Hour-glass contraction	Spastic manifestations rare
Rugæ commonly accentuated and converge toward niche	Rugæ adjacent to niche often faintly marked or effaced
Pylorus spastic	Pylorus gaping
Localized tenderness over ulcer	Ulcer seldom tender to pressure

be deceptive. For example, among the patients examined at the clinic in the last few years was one with two ulcers on the lesser curvature which, both clinically and roent-

also ulcerates, of course, but ordinarily the infiltrative stiffening and contraction of the gastric wall are conspicuous and characteristic.



Fig. 4a. Large ulcerating carcinoma in distal third of stomach; the barium-filled, meniscus-shaped crater partially surrounded by the characteristic halo, constituting the meniscus-sign complex, can easily be seen; b, small ulcerating carcinoma on the lesser curvature with the typical meniscus-sign complex, and c, small ulcerating carcinoma, 1.5 cm. in diameter, showing meniscus-sign complex on the lesser curvature at the angle (indicated by the arrow). Grossly, this lesion before and after surgical removal was thought by the surgeon and pathologist to be benign, but microscopic diagnosis was ulcerated adenocarcinoma, grade 3.

genologically, appeared to be benign. After hospitalization and medical management, clinical cure resulted and all roentgenologic signs of the ulcers disappeared. A few months later the patient returned. Both ulcers had recurred and grown larger, and the lesions were found at operation to be carcinomatous.

Clinical review and coöperation are especially desirable to determine the probable nature of prepyloric ulcers. In many cases the niche of the ulcer is not demonstrable, spastic or organic contraction of the antrum dominates the picture, and the roentgenologist may be able to say only that a prepyloric lesion is present.

Ulcerating Carcinoma

Benign intragastric tumors commonly ulcerate, but not deeply, and the lesions are essentially tumorous rather than ulcerous. Usually the growths are multiple, pedunculated, and have fairly smooth surfaces. The outline of the gastric wall is likely to be preserved and peristalsis is not altered. Accordingly, the roentgenologic diagnosis of benign tumor is most often correct, but, as benign growths tend to become malignant, surgery cannot safely be delayed. Large soft carcinomas of the stomach usually ulcerate; but tumefaction, with the corresponding large defect which it produces, is predominant and the roentgenologic diagnosis is seldom in error. Scirrhus cancer

Small ulcerating carcinomas are less easy to discover and identify unless the roentgenoscopic and roentgenographic technics are appropriate and are carefully executed. Occasionally they are encountered when exceedingly small and are then likely to be overlooked. In many instances ulceration so preponderates that the element of tumefaction is not readily apparent. Some years ago Carman observed that when an ulcerating carcinoma is situated on the lesser curvature, the crater of the ulcer appeared roentgenoscopically as a concavo-convex shadow, and, because its shape was like that of a lens, Carman applied to it the term "meniscus." At the clinic, the diagnostic value of the meniscus sign with its attendant phenomena has been abundantly verified.

Although the meniscal form of the crater, as seen in typical and somewhat advanced cases, is important, I consider the slightly raised, overhanging border to be even more significant, for it is more constant than the crescentic crater. Under pressure the ridge appears as a clear zone or halo encircling the ulcerated area if the latter is situated on the posterior wall; if the lesion is on the lesser curvature the ridge separates the crater from the shadow of the barium in the stomach (Fig. 4a, b and c). In addition, the niche does not project beyond the normal line of the lumen, the adjacent rugæ are faint or obliterated, it is not tender to

pressure, and spastic phenomena are absent. Practically, however, these accessory signs are superfluous, and the clear zone representing the infiltrated border of the ulcerous lesion is sufficiently distinctive. In every surgical case in which the meniscus complex was elicited, an ulcerating carcinoma was found at operation. In several cases observed at the clinic during recent months the lesion varied from 1 to 3 cm. in diameter, yet the diagnosis was made with assurance, although in certain instances the lesion after excision bore no macroscopic signs of malignancy.

In conclusion, it may be said that the diagnosis of malignant disease of the stomach by either the clinician or the roentgenologist is usually reliable, but the opinion

of either that a lesion is benign is less trustworthy. One obstacle to the diagnosis of early malignant disease is the inclination to think of gastric carcinoma as a gross tumor, not as an ulcer. It is true, unfortunately, that most carcinomas at the time of discovery are large tumors and usually inoperable. It is also true that most niche ulcers are benign. But malignant ulcers and ulcerating carcinomas in which neoplasia is not obvious must be kept in mind. It should not be forgotten that two-thirds of all gastric lesions are carcinomatous. Hence, when organic disease of the stomach is discovered, it should never be considered with finality as benign and nonsurgical unless abundant and flawless evidence can be adduced to sustain the diagnosis.

TREATMENT OF FUNCTIONAL GYNECOLOGIC DISORDERS BY PITUITARY AND OVARIAN IRRADIATION*

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Irradiation of the pituitary gland, in the treatment of benign gynecological disorders, was instituted as an empirical procedure. The attempt was based on the observation that gynecological symptoms were often improved in patients undergoing irradiation for pituitary tumor.

In 1922, Hofbauer reported good results in a series of patients subjected to pituitary irradiation for gynecological conditions. Similar studies, by Werner and Shaver, and Borak, appeared in 1923 and 1924. Patients presenting evidences of hypopituitarism or hypoövarianism responded most favorably to the treatment. The optimum amount of radiation was much smaller than that used in tumor therapy. Effective results were obtained, in many instances, with exposures scarcely greater than those used in roentgenographic procedures. This low dosage produced no microscopic evidences of cellular change. The term stimulation therapy was applied to this type of treatment, because of the apparent increase in hormone production which was obtained. No biologic proof that there is a direct stimulation has been presented.

Certain gynecologists began to irradiate the ovaries directly in cases which were primarily hypogonadal. Irradiation of the ovaries was combined with that of the pituitary, at times. This was considered safe, because irradiation within the limits used, produced no evidence of a destructive effect on the most radio-sensitive cells.

The rapid advance of biochemistry has furnished evidence to confirm the theories of etiology for many of the syndromes in the clinical category of ovarian and pituitary hypofunction. More effective hormone preparations have been developed for use in treatment, also. It is difficult to obtain complete and accurate data in these types of cases, however. Expense of treatment and lack of adequate laboratory facilities prevent complete biological studies in many cases. Hormone treatment often fails even when prolonged and intensive. It is for these cases that radiation therapy has been advocated.

The interest of the physician centers on the questions of the safety of radiation therapy, the possibility of late sequelæ of an undesirable nature, and its relative efficiency.

The patients under consideration present primary disturbances of the menses, for

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which no organic cause can be found. They also present stigmata of pituitary or hypogonadal disturbances. In addition, there are those who suffer marked symptoms at the climacteric.

The common symptoms are amenorrhea, oligo- or hypomenorrhea, menorrhagia, and sterility. Menorrhagia, in young women without definite pelvic pathology or evidence of systemic disease, is regarded by most gynecologists as a phase of the same endocrine deficiency which produces amenorrhea in other patients. Luteinization of the follicle is apparently inhibited in the menorrhagic cases. In amenorrhea, the graafian follicle does not produce sufficient hormone to bring about the normal endometrial cyclic change. Dysmenorrhea and sterility are associated symptoms in most cases of gonadal, and some cases of pituitary disturbance.

Pituitary irradiation has been used extensively by many gynecologists for exaggerated symptoms of the menopause. It is known that the level of anterior pituitary hormones in the blood is greater at this period. Fluhman demonstrated, in patients who had been irradiated by Newell with light exposures of x-ray, that there was an appreciable fall in the blood level of these hormones within a few hours after treatment. It is questionable whether this immediate decrease is a constant finding, representing the basis of satisfactory results in this type of patient.

The experience gained by prolonged observation of patients treated with heavy exposure of rays for tumors of the pituitary gives assurance of freedom from immediate or late harmful effects after irradiation of the pituitary gland. There has been greater apprehension in applying even light exposures to the ovaries. Ford and Drips carried on a series of studies of the ovaries of rats ten years ago, after the application of graded doses of radiation. They were unable to detect any degenerative histologic changes in the ovaries over periods of one year to eighteen months, after giving doses within the limits of those used in this type of therapy. Schoenhof conducted immediate studies (within five to seven days) after irradiation of a group of young women, treated before undergoing hysterectomy for carcinoma of the cervix, with negative findings. In the earliest cases, with marked

menstrual disorders, selected for treatment at the Mayo Clinic, Ford applied irradiation to one ovary. These were all cases in which a thorough trial of hormone therapy had proved unsuccessful. Clinical experience has since shown the relative safety of the procedure. Ford repeated ovarian radiation six times, in a six year period, in one patient who had suffered incapacitating dysmenorrhea. There was no evidence at the end of eight years of a disturbance of menstrual rhythm.

Mazer applied ovarian irradiation, of this type, in eleven cases of young women with normal menstrual rhythm; in six because of sterility, and in five for hypomenorrhea. None of the patients showed any variation in menstrual regularity after three years. The cases treated by Ford, between 1927 and 1931, which have been followed have shown no evidence of a precocious menopause or an aggravation of symptoms, which could be considered due to radiation. This is in accord with Borak, who uses both pituitary and ovarian irradiation; and with Werner, who has limited his treatment to the pituitary. Their experience has covered many hundreds of cases and is based on eight and nine year observation periods.

There are many examples of spontaneous improvement in the functional cases under consideration. The symptoms are subjective, to some degree, in dysmenorrhea; and the possibility of suggestion playing a role in the patient's evaluation of treatment is recognized. Newell planned a series of treatments to eliminate bias, of either patient or radiologist, in the interpretation of results. Patients were treated alternately with one of two treatment cones, identical in appearance and weight. A lead filter was interposed between the tube and patient in one. The cones were designated A and B, and the radiologist was unaware which contained the filter until after the records had been kept for a prolonged period. It was found that with either cone used there was a tendency for the patient to report an early improvement in symptoms, indicating the element of suggestion. There was a clear difference in the two groups of cases over a longer period, however. At least two-thirds of those having only the simulated treatment had no change in symptoms. Two-thirds of the cases treated for dysmenorrhea reported relief. Newell's results were less convincing in the treatment of

menorrhagia, amenorrhea, menopausal symptoms, sterility, and frigidity. His technique consisted of divided doses of rays, produced at 200 KvP., filtered through $\frac{3}{4}$ mm. copper; and giving a total dose of 285 r units to each of two lateral pituitary fields, within a three weeks' period.

Mazer combined pituitary and ovarian irradiation, in doses of 50 to 80 r units per field, for three exposures to each field, at weekly intervals; using a ray of moderate length, produced at 127 KvP., and filtered through 5 mm. aluminum. He found the treatment most effective for the relief of amenorrhea, and the control of menorrhagia. In group of fifty-one amenorrheic patients, twenty-three had been menstruating regularly since treatment for periods of one to four years, without the stimulus of intervening pregnancy, at the time of his report. Two patients had become pregnant. Of thirteen patients with menorrhagia, ten were relieved, and had remained well for an average period of two and eight-tenths years. Dysmenorrhea, which Mazer believes is associated primarily with ovarian hypofunction, had been relieved in only five of fourteen cases. Two patients improved after pregnancy. Thirty-eight patients, married to healthy males, who were previously sterile had borne eighteen healthy children; two were pregnant at the time of the report; two had had abortions, one of whom had a normal full-term pregnancy later. Mazer states that, in the treatment of amenorrhea and sterility, no other agent at our disposal gives as satisfactory results with so little trouble and expense.

The majority of the cases treated by Ford and Drips at the Mayo Clinic between 1927 and 1931 received ovarian irradiation. Some were given a combination of ovarian and pituitary radiation, and a few pituitary treatment only. The exposures varied from 150 to 200 r units per field, with the rays produced at 200 KvP., filtered through $\frac{1}{2}$ mm. copper. A single exposure was given to each field, and treatment never repeated within a two months' period. Most patients had one treatment only.

Of twenty-nine single women treated for amenorrhea, menses were reestablished for at least three months in twenty-one; continued regularly for one and one-half to six years in seventeen. Eight patients failed to respond to treatment. Of thirty-seven

married women with amenorrhea or hypomenorrhea and sterility, menstruation was reestablished for at least three months in twenty; continued regularly for one and one-half to six years in fourteen. Thirteen of this group failed to respond to treatment. Nine patients became pregnant within a short time after treatment. There had been no definite results in the reestablishment of menstruation or fertility, in the same type of cases prior to 1927. In a comparative review of all types of treatment in two hundred forty-four cases of amenorrheic disorders, presented in 1934, Drips found that low dosage irradiation of the ovaries or hypophysis had proved the most effective therapeutic agent.

Ford and Drips had a limited experience with the menorrhagias and menopausal syndrome. The latter field was abandoned early because of variability in results, and the marked element of suggestion in this type of case. Others have reported good results in the relief of the most distressing symptoms associated with the climacteric. Collins, Menville and Thomas presented a series of forty-seven cases of menopausal syndrome, the most common symptoms being frequent flushes, dizziness, headaches and nervousness. Irradiation of the pituitary gland with one hundred and forty-eight r units per field with rays produced at 120 KvP. and $\frac{1}{4}$ mm. copper filter led to excellent results in 40 of the 47 cases, in that all symptoms complained of either disappeared entirely or occurred so infrequently or mildly as to cause no inconvenience or discomfort. The longest observation period was sixteen months, the patient remaining free from symptoms during that time.

Whether the differences reported in response of the various syndromes is associated with minor differences in technic as noted in a comparison of the technical factors listed here, or are only an evidence of the subjective element in interpretation of results is questionable and requires further study.

The experience of the treatment of similar cases at the Woman's Hospital in Detroit during the past eighteen months has brought forward certain difficulties of making this form of therapy available to the general practice which we wish to emphasize. In the work, so far reported, cases

have been selected by the same individual or small group of individuals with certain fixed standards or criteria for evaluating the status of endocrine disturbance. With an open staff and an increasing interest in this form of therapy, cases are referred to the radiologic department with specific requests for either pituitary or ovarian irradiation. While many of the cases have been intensively and well studied and accurate data are provided, other cases represent a tendency to try pituitary irradiation in any confusing or unexplainable syndrome, or in obvious general systemic disease, in the hope that if menstrual symptoms are corrected the general condition may improve. We believe it would be to the best interests of patients and physicians to organize endocrine clinics, in general hospitals, to discuss cases of functional disorders for radiation therapy. This would also safeguard this type of radiotherapy from disrepute. This can be done without presentation of the patient before a group, and would not disturb private patient status, or the relation of the patient to her physician. It would lead to improvement in results of cases treated, and to recognition of subgroups among the large number of patients with endocrine disorders. The follow-up of cases referred for treatment in a general hospital is difficult, as no direct contact is made by the hospital or radiologist with the patient. We must depend upon reports from the physicians as to results. We feel that if this can be followed there would be a better control of results than if the subsequent reports are tabulated by those who are carrying on the work and are perhaps biased. There is little point in listing our relatively small groups from the Woman's Hospital. We have had instances of notable improvement in dysmenorrhea, especially of the type associated with marked nausea and vomiting; and in a few cases of amenorrhea and sterility, one of the amenorrheic cases continuing to menstruate regularly for fifteen months since the single treatment, a second for one year, after having an ectopic pregnancy two months after the treatment. We feel that the majority of

cases referred for treatment because of sterility have been poorly selected. In one case of severe mastodynia and marked psychic depression in a woman of forty years mastodynia was entirely relieved and there has been a complete change in mental poise since the treatment. A second case of marked neuroses in a woman over forty was apparently aggravated by treatment. We have also encountered some severe immediate reactions in the nature of intense headaches for the first twenty-four hours after pituitary irradiation, most of these patients having had definite enough relief of dysmenorrhea so that the patients have requested a second treatment after several months if there was any indication of return of the dysmenorrhea, in spite of the immediate reaction. One case referred for treatment of a so-called pituitary headache has been worse since the treatment. In this case there were insufficient data for us to rule out a nephritis as the essential cause of the headache.

In conclusion we wish to emphasize that although there is convincing evidence of possible alteration of some of the syndromes associated with pituitary or ovarian dysfunctions by light exposures of these glands to irradiation, that this is still a field in which accurate control of results is necessary in order to improve our judgment in the selection of cases. We believe this radiation therapy should be reserved to cases where all methods of hormone administration have failed and that where such radiation therapy is offered in a general hospital it should be suitably regulated by an advisory committee or clinic to insure conservative and efficient application.

Bibliography

1. Borak, J.: Treatment of hyperthyroidism by irradiation of the pituitary. *Radiology*, 24:535-549, 1935.
2. Collins, C. G., Menville, L. J., and Thomas, E. P.: Study of series of menopausal cases after irradiation of the pituitary gland. *Radiology*, 26:682-684, 1936.
3. Drips, D. G.: Treatment of amenorrheic states in young women. *Iowa State Journal of Medicine*, Jan., 1934.
4. Mazer, Chas., and Spitz, Louis, Jr. Therapeutic value of low dosage irradiation of the pituitary gland and ovaries in functional menstrual disorders. *Am. J. Obst. and Gyn.*, 30:214-22, 1935.
5. Newell, R. R., and Petit, A. V.: Effect of irradiation of the pituitary gland in dysmenorrhea. *Radiology*, 25:424-428, 1935.

RADIATION THERAPY IN DERMATOLOGY*

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During the last few years no startling advances have been made in the method of applying radiation therapy to the common dermatoses. Radiation therapy, since the discovery of x-rays in 1895, has been used empirically for the more common skin affections with relatively few delayed reactions and bad results. It is a generally known fact that radiation therapy is given with an involved hazard, but it so happens that most of the non-malignant dermatoses respond to a fractional erythema dose which, unless repeated too frequently, has no injurious effect on the skin. Consequently, radiation therapy still commands a high position in the armamentarium of dermatological therapy.

A multitude of technics (some being very hazardous) can be used on most of the cutaneous affections with benefit and often with cures; but in our opinion in treating a non-malignant cutaneous condition it is better to lose a patient because of failure to cure than to cure at the expense of overdosing and subsequent cosmetic disfigurement. The treatment of malignant dermatoses, however, is quite another problem. It is unfortunate that many skin malignancies have been and many still are being under-treated by radiation therapy. An improper initial dose may be the very cause for failure to cure. The percentage of cures can be greatly enlarged if proper treatment is given. Hypermassive treatment is absolutely necessary if malignancy of the skin is to be successfully handled and treated with radiation therapy. The radiologist or physician accustomed to mediocre results can obtain excellent results by changing to the proper technic—the hypermassive technic of treatment which will be discussed in detail later.

A brief review of the facts and theories of how radiation energy is carried, and absorbed by the skin and acts on the underlying cellular structure is essential if the therapeutic effect on living tissue is to be explained. Tissue reaction and tissue response to irradiation are complicated mechanisms. Only the absorbed radiation is biologically active.

How Do X-rays React?

Holthusen concludes that there is a good reason to believe that x-rays, as well as other electro-magnetic rays, attack the albumin molecule first and the lipid next. Changes

involve all parts of the cell—nucleus, cytoplasm and cell membrane. Split proteins are produced, no doubt, and exercise an effect which may be beneficial to some and detrimental to others. This constitutes the basis for the protein reaction theory.

Other observers have attempted to explain the biological effect of x-rays and radium rays in cellular structure on histological and histogenetic findings. The microscopic findings show the morphological changes, but these fail to explain what actually happens. Consequently x-rays are said to react (1) directly and (2) indirectly. Some of the local or direct changes have been pointed out by Beatrice Pullinger, such as—the immediate reaction to x-rays or radium is an intense hyperemia with stasis of the blood and local edema. Small platelet thrombi develop in the engorged vessels. Some cell destruction results from thrombosis and anemic necrosis. In the presence of an infection large doses of x-rays contribute to the formation of thrombi. Consequently small doses of x-rays should be given when treating an infection. Desjardins states that the action of x-rays and radium on normal tissue is first on the lymphocytes. Lymphocytes are easily destroyed. Desjardins and others have stated that on their destruction lymphocytes liberate an antibody. To quote Desjardins further: Radio-sensitivity of cells is listed as follows: (1) Lymphoid cells; (2) Polymorphonuclear; (3) Basal epithelium of the salivary glands being most sensitive and those of the testis and ovary being the next most sensitive; (4) Endothelial cells of blood vessels, pleura and peritoneum; (5) Connective tissue cells; (6) Muscular cells; (7) Bony tissue; (8) Nerve cells.

It is incorrect to think of irradiation having a direct stimulating effect. Paradoxical-

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ly, stimulation results because there is an acceleration of cellular activity which is the indirect response to wave stimulation of a biochemical and a biophysical nature. Additional remarks will be made later relative to the stimulating effect of x-rays. Now, the beneficial effect from irradiation resulting from the indirect reaction may be due to the response of normal contiguous structures which are in the field of exposure and by the constitutional stimulation which results from the split protein reaction, enzymes, etc. All cells contain enzymes that are necessary for growth, reproduction and function. These intracellular enzymes appear to be greatly influenced by radiation. The autolytic or catalytic enzymes are more easily affected than those having the opposite or the synthesizing effect. Radiation, when given in the sensitive premitotic phase, may have an inhibitory action that prevents cells from completely undergoing mitosis. Some of the miscellaneous reaction which has been reported can be summed up in a few short sentences.

Herzog thinks that brief general irradiation stimulates blood formation, the action being due to the formation of chemical substances in the body which excite a stimulating influence. Strauss is of the opinion that cell lipoids are ionized. Dessauer's "Heat-point theory" is interesting—this is an attempt to explain cell activity on a physical premise. Held reports a general action on blood sugar regulation and a sugar-transforming action in the areas irradiated. MacKee gives three hypotheses which have been advanced to explain the biological effect of x-rays and radium:

- (1) **Lecithin Hypothesis:** Lecithin is an important constituent of animal cells. (The changes in the chromatin were due to decomposition of the lecithin.)
- (2) **Chromatin Hypothesis:** Microscopical examination shows chromatin change after irradiation. (The change, however, is not confined to chromatin.)
- (3) **Enzymatic Hypothesis:** (This theory explains in part some of the biological changes. The final explanation may be based on a chemical and physical interpretation.)

This foregoing incomplete review is mentioned to emphasize the fact that electro-magnetic waves react in a complicated manner. Recently changes in the circulating

blood stream have been studied following irradiation as well as the effect on the neurovegetative system, but much experimental work remains to be done.

How Are X-rays Carried?

Energy from radiation is carried by electro-magnetic waves, in small bundles, called quanta (Planck's theory). The intensity of radiation depends upon the number of quanta delivered to the surface per second, that is, upon the frequency of vibration. Different forms of radiation energy have different phases and frequencies and consequently give a different distribution of energy because of the difference in wave lengths. The penetration of an X-ray beam depends upon its wave length—short x-ray penetrate deeper and the short waves, strangely, are the hard waves. Long or soft x-rays act superficially. In the treatment of dermatoses we are concerned particularly in the response of the cutis to x-rays and marked benefits have been observed by using the unfiltered and long x-rays. In the treatment of malignancies another factor enters and we are concerned in what happens 5 cms. or more below the skin surface. Consequently a mixed form of treatment is indicated which will be discussed a little more in detail at a later time.

Thus it can be seen that the biological reaction to a marked degree depends upon the intensity and the time of radiation, while the biological effect depends to a greater degree on the amount of energy actually absorbed by the tissue.

The various forms of electro-magnetic waves used for therapeutic purposes may be classified as follows:

- (1) Short Hertzian
- (2) Infra-Red
- (3) Visible
- (4) Ultra-Violet
- (5) X-Rays
- (6) Beta rays of Radium
- (7) Gamma rays of Radium

Hertzian waves are used in desiccation and electro-coagulation.

Infra-Red rays are used for their heat effect.

Visible Light: Visible light has been thought to have some bacteriocidal effect. It is impossible, at this time, to go into a detailed discussion of the theories relative to their action and benefit. In the remain-

ing time the more important action of ultra-violet rays, x-rays and radium will be considered.

Ultra-Violet rays: Ultra-violet irradiation was used empirically for many years to treat and to prevent rickets before Steenbock and Windaus pointed out that the resistance to rickets was due to an irradiated substance—one of the sterols of cholesterol which is now called ergosterol. It was pointed out by Stevens in 1930 and by others that the cells of the skin contain more cholesterol than any other organ of the body. One of the sterols of cholesterol is responsible when irradiated with ultra-violet light for the protection and cure of rickets. Likewise, Hoffman, as early as 1916, advanced the belief that irradiation of the skin produced a protective material in the nature of a secretion which counteracted many infectious diseases.

Many observers concur with Hoffman that the skin is a protective organ of the body and that this protection comes from both the epidermis, which is the outer mechanical covering, and from the cellular activity and response of the cutis. To go a little more into detail, when one considers the histology of the cutis in which there are collagenous and elastic tissues, endothelial lining of the blood and the lymphatic spaces, sebaceous and sweat glands, etc., it seems logical that these different tissues may have some secretory function which contributes to the well being of the individual. Some recent works in immunity, anaphylaxis, allergy and endocrinology support the assumption of cellular protective activity. In all probability, this secretion or enzymes is absorbed and carried to other tissues not anatomically a part of the skin, and thus exercises some physiological function in the protective mechanism of the body. Finsen found that irradiation of normal and diseased epithelial cells resulted in a changed chemistry which has an important role in the process of healing. The bactericidal action was indirect.

Ultra-violet Ray Energy

The energy quanta of ultra-violet produces a molecular change in the cellular tissue it strikes. This results in a chemical action due to electronic activity. It has been pointed out that the erythema of the

skin from ultra-violet rays may be due to this chemical and molecular change. There are no scattering electrons or atoms to carry the energy or even a part of the energy quanta to other atoms following ultra-violet irradiation, in which respect it is different from x-ray or radium, as the latter scatter electrons. From a biochemical standpoint, it has been found that the sero-albumin of the tissue after ultra-violet irradiation becomes more or less opaque to subsequent ultra-violet rays.

General Treatment

The object of therapeutic application of various forms of radiation is to cure the pathological condition or to relieve objective and subjective symptoms. It is impossible at this time to consider the various dermatological conditions which will respond to x-ray therapy. The field can be covered briefly, and a few of the disease entities can be mentioned if the dermatological conditions are grouped according to their histopathological findings and specific origin. For example, Group 1 of the inflammatory conditions resulting from specific organisms includes furunculosis, carbuncles, erysipelas and cellulitis, and to this group may be added the dermatoses due wholly or partially to pyogenic organisms, of which acne vulgaris is perhaps the one condition most frequently encountered. Others in the group are rosacea, sycosis vulgaris, pronychia and a group of miscellaneous diseases. These conditions show inflammatory reaction in the cutis which has been found to be radio-sensitive.

A second group of inflammatory conditions resulting from fungi—all types of ringworm, including scalp, beard, nails and glabrous skin, improve following radiation therapy. The beneficial effects from radiation are not the result of direct reaction on the fungi but are the cellular response to the biochemical change, etc., which makes the skin an unfavorable soil, at least temporarily, for the growth of fungi. Recurrences are due to reinfection. Along with this group of fungi may be classified blastomycosis and actinomycosis.

A third group of inflammatory conditions of the skin is due to chemical irritants—dermatitis venenata; occupational dermatitis; allergic dermatosis, etc. All of the above named conditions respond to x-ray therapy.

A fourth group includes the chronic specific inflammatory diseases — another group of inflammatory dermatoses which are usually classified by dermatologists as chronic specific inflammations. Some of these conditions respond to treatment while others do not. For example, this group includes the various types of tuberculosis and their toxic manifestations. The author suggests that there is a definite relation of response to x-ray therapy depending upon the acute exacerbation of inflammatory activity in relation to the time of treatment. In other words, the cellular infiltrate of an acute inflammatory reaction is more radio-sensitive than one resulting from a low-grade chronic inflammatory reaction. Does this not explain why there are good, bad and indifferent results following the x-ray treatment of tuberculosis of the skin? Give fractional doses during the inflammatory stage and observe the marked improvement.

Syphilis is mentioned here simply because it is classified as a chronic specific inflammatory disease and is a condition which does not respond to irradiation therapy. R. J. Cowan in 1905 reported that x-ray therapy was beneficial in tertiary lesions of the skin—perhaps a marked secondary inflammatory involvement accompanied the luetic infection.

Hypertrophies and New Growths (exclusive of malignancy)

In certain hypertrophies and new growths of the skin x-ray and radium have been found to be of distinct service. In others, it appears to be of little use. This again may be due in part to the kind of cells in the cutis and the cellular infiltrate which accompanies the condition. For example, keratosis follicularis usually responds to x-ray therapy. Histologically lymphocytes, fibroblasts and giant cells of a foreign body type are present.

Keloids

Keloids respond to irradiation therapy. Histologically it is a connective tissue new growth limited to the corium. The cells present numerous mitotic figures. Mitotic cells are radio-sensitive.

Angiomas and Birthmarks

The treatment of choice is usually radiation therapy. The histopathology is for the most part in the superficial layers of

the corium. The blood vessels and lymph-spaces are lined with endothelium and usually there is marked proliferation of connective tissue. These various types of tissues and cells are radio-sensitive, particularly to the radium rays.

Verruca—Warts

These may be treated successfully by radiation. Hypermassive doses are the most effective.

Senile Keratosis

Senile keratoses are radio-sensitive. Many are potentially malignant. Consequently hypermassive irradiation is indicated.

Treatment of Epitheliomas—Skin Malignancies

In such diseases as malignancies it is necessary to use a dosage of x-ray or radium which may produce a violent local dermatitis with the subjective symptoms of burning and tingling. In squamous cell carcinoma it is desirable to irradiate the adjacent lymphatic glands with heavily filtered rays administered fractionally until a so-called Coutard reaction is produced. If such a form of treatment is undertaken the patient should be told that a violent reaction will follow which will require a few weeks to subside. If the lesion to be treated involves the lip, the patient may have some difficulty in swallowing for a few weeks following treatment. The patient must be assured, as treatment progresses, that the violent reaction is necessary. The author is of the opinion that many skin malignancies are under-treated. Hypermassive unfiltered x-ray has been used for over 20 years in treating epitheliomas of both the basal and squamous cell types. But in spite of this fact many dermatologists still need to be converted to the hypermassive form of treatment. It is possible to cure many of the basal-cell epitheliomas with a single x-ray exposure provided that a sufficient number of roentgen units are given. The surrounding tissue must be thoroughly protected with lead or other suitable material. If unfiltered rays are used it is advisable to treat an area of 2 cms. or less in diameter. If the malignancy is larger than 2 cms. in diameter it should be treated with small peripheral areas of exposures. Two thousand roentgen units measured in air can be given at the initial treatment to each small area. The small areas do not permit a

depth dose of any consequence as there are relatively few back-scattered and tissue rays with small areas. This controls the depth dose. The reason why many basal cell epitheliomas respond to a single exposure is that the primary or principal effect of the hypermassive treatment is a direct action on the neoplastic cell itself—a cytocaustic effect results.

Treatment of General Inflammatory Conditions

It has been found that small fractional doses of filtered x-ray are of distinct service in the treatment of recurrent furuncles and carbuncles as previously mentioned. The author is of the opinion that x-ray therapy is the treatment of choice for carbuncles and is of distinct service in treating certain types of acute inflammatory diseases. Filtered x-ray is particularly indicated in cellulitis, erysipelas, and other inflammatory conditions which cannot be classified as dermatological diseases. The treatment for inflammatory conditions is most effective if given during the stage of leukocytic infiltration before actual suppuration takes place. It has long been known that the lymphocytes are easily destroyed by x-ray and the most plausible explanation of the beneficial reaction is due to a lymphocytic destruction. According to Desjardins—J.A.M.A., 96:401, (Feb. 7) 1931—lymphocytes probably contain a protective substance which is available for defense against invading organisms when liberated by the cells on disintegration. The greater number of lymphocytes present and the greater number affected by x-ray the greater are the benefits resulting. Then, too, the leukocytes are quite vulnerable to x-ray. It is probable that on their destruction a protective substance results.

The author has observed that the skin affections which respond most readily to fractional x-ray are the ones which present some congestion and hyperemia. In other words, the acute inflammatory conditions with their acute inflammatory infiltrate respond more rapidly to x-ray than does the chronic inflammatory skin condition. Can this difference in response to irradiation

therapy be explained on the basis of cellular infiltrate? Is it a stimulating effect—a paradoxical stimulating action? A physical explanation has been offered: Inflammation, congestion, hyperemia and stasis are accompanied by a localized increase in iron content—hemoglobin. X-ray treatment produces more secondary rays due to the increase of iron and hence a stimulating effect results. It is the author's opinion that the action of the rays on the acute inflammatory cellular infiltrate, which in many instances is lymphocytic, leukocytic, etc., is of more importance than the increase of the secondary rays from the iron content. Years ago, an acute inflammatory skin reaction was given as one of the definite contra-indications to x-ray. Today, it is one of the indications for fractional filtered x-ray therapy. The type of infiltrate in the cutis changes as the condition passes from the acute to the chronic stage. Round cells and plasma cells of the chronic inflammatory stage are not as radiosensitive as the lymphocytes and leukocytes of the acute inflammatory involvement.

Would it not be logical then, in treating chronic inflammatory dermatitis, to produce a super-imposed acute inflammation—chemical for example—just before x-ray therapy is given? This form of therapy has been found useful but no one as far as the author knows has ever given this correlation of response of the acute inflammatory infiltrate to x-ray treatment.

Conclusions

Hypermassive unfiltered x-ray treatment is indicated for local skin malignancies. The lymphatics and surrounding skin should be treated with heavily fractional radiation therapy. Under-treatment is dangerous.

Inflammatory conditions should be treated with fractional doses of filtered x-ray at frequent intervals. Over-treatment is extremely dangerous. It is better to err on the side of under-treatment and filters. Unfiltered x-ray is used too extensively in treating dermatological conditions. Filtered rays which produce a greater depth cellular response with less hazard to the skin should be the method of choice.

PRIMARY CARCINOMA OF THE LUNG*

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Our ideas regarding the incidence of pulmonary malignancies have undergone considerable change in the past fifteen years. Today cancer of the lung has become a very definite clinical entity. This can be ascribed to the facts that we have become increasingly "malignant minded," that the roentgen-ray diagnosis has attained a foremost position, and that the development of the bronchoscope has enabled the pathologist to step in and verify the diagnosis before death claims the patient.

Statistical studies have brought us no nearer the solution of the cause of pulmonary malignancy. It is well known that lung cancer is frequent in certain types of miners, especially those working in the cobalt mines. The association of benzine products, such as asphalt, tar, and motor gases, has been noted. These factors may have some bearing on the apparent relative increase of carcinoma of the lung. The association of tuberculosis and pneumoconiosis with lung cancer has rarely been noted in our own experience.

Primary carcinoma of the lung is relatively rare in the colored. It is much more prevalent in the male than in the female, the proportion being about 9:1. Approximately fifty per cent of our own cases were found in people of Polish and Slavic descent.

The most common and earliest complaint noted was cough, and then, in their statistical order, pains in the chest, weakness, weight loss, and hemoptysis. Dyspnea is a relatively rare complaint. It is an interesting side-light to note that approximately one-quarter of the patients enter the hospital with a history simulating an acute pneumonic onset which was not infrequently supported by a similar clinical diagnosis.

From the radiograph, it is most simple and convenient to divide carcinoma of the lung into two main groups: (1) The obstructive type, which primarily initiates within the wall of the bronchus and grows into the lumen causing a varying degree of atelectasis quite early with associated infection, (2) the infiltrative type which primarily invades the surrounding parenchyma early and obstructs the lumen of the bronchus late.

In the diagnosis of primary pulmonary

malignancy the radiologist depends upon the presence of bronchial obstruction with associated atelectasis and the presence of infiltration and consolidation with no infrequent breaking down of the tumor mass to give him the necessary clue in the diagnosis. The added use of the Bucky diaphragm for penetration and visualization of the dense shadows, and the visualization of the bronchial tree by the instillation of lipiodol, have enabled the roentgenologist to give a correct diagnosis in as high as 80 per cent of the cases.

When a picture of atelectasis confronts the radiologist, the differential diagnosis takes on a complicated aspect. Atelectasis can be caused by obstruction within the bronchus or by pressure upon the bronchus from without.

Pneumonia is one of the most important conditions to be ruled out because so frequently patients enter with the typical history and findings of the disease. The diagnosis becomes doubly difficult when we know that the obstructive types of bronchogenic cancer are almost invariably complicated by the presence of secondary infection. The decreased aeration promotes a favorable soil for the multiplication of the bacterial inhabitants of the bronchial tree resulting in the clinical signs of pneumonia. The length of onset and general condition frequently determine the diagnosis.

Mucus plug following operation is not an infrequent cause of atelectasis. Here the rapidity of onset is the determining factor in the diagnosis. Opaque and non-opaque foreign body must also be considered. Extrabronchial causes of bronchial stenosis produce the same radiographic picture as the intrabronchial occlusions.

One of the most important and most difficult of the extrabronchial causes to rule

*The papers by Dr. Kenning, Dr. Brines, Dr. Leucutia and Dr. Donald constitute a symposium on carcinoma of the lung. Another paper read by Dr. McCord before the Section on Radiology will appear in the August number of this JOURNAL.

out is aortic aneurysm. A correct diagnosis from the radiograph is rarely possible in such cases. Occasionally a Bucky film will show the presence of focal areas of aeration in the periphery of the involved lobe. Generally, the atelectasis found in carcinoma is complete, so that in the presence of a positive Wassermann it is not illogical to assume that a large aneurysm which slightly releases the pressure on the bronchus during diastole can allow a small amount of air to slip into the lung and give the focal aeration.

Mediastinal neoplasms are always to be thought of in the presence of atelectasis. The most common causes to be considered are: Lymphosarcoma, Hodgkin's and leukemic glands. Chronic fibroid tuberculosis and chronic interstitial pneumonitis occasionally add to the burden of the differential diagnosis. The second large group of primary pulmonary neoplasms that confront the radiologist is the infiltrative type, also known as the oat-cell type of carcinoma. This group may assume a hilar, lobar, a diffuse, or a nodular character. This type of classification is really a descriptive picture designed to aid in fixing a mental picture of the anatomical and pathological changes taking place.

The hilar type of newgrowth is seen as a small patch of infiltration and consolidation, usually adjacent to the hilum. This must be differentiated from hilum tuberculosis, beginning abscess, early pneumonia, and unresolved pneumonia. Serial roentgenograms, history, sputum, and blood studies will enable the radiologist to reach a correct conclusion.

The infiltrating type of tumor may extend farther throughout the parenchyma by way of the lymphatics and bronchi to involve a whole lobe or even an entire lung. This type of infiltrating newgrowth will produce the lobar and diffuse forms of newgrowth.

These neoplasms give very interesting pictures and problems for differential diagnosis. The findings usually noted are those of an infiltrative and somewhat patchy opacity with an irregular, invading peripheral border. There seldom is any indication of displacement of the mediastinal structures. The latter is noted late in the disease when there has been involvement of the pleura with resulting irritation and effusion. The use of lipiodol in this type of growth is

frequently of aid to the roentgenologist. Although there is no change noted in the bronchial mucosa itself, comparison of the two sides, especially looking for encroachment upon the lumina, for aberrant courses assumed by the bronchi displaced by the malignant tissue, and for the sudden chopping off of the smaller bronchi, will enable the roentgenologist to come to very definite conclusions.

The invasive quality, particularly of the diffuse and nodular types, leads to a complication that gives another diagnostic point. Because of this invasive quality, the tumor destroys large numbers of vessels, and, in doing so, decreases its own blood supply so that sooner or later the central mass begins to degenerate. This necrotic process gradually liquefies and finally breaks into a bronchus. Following this, air enters the cavity and makes known the presence of the abscess on the radiograph. Numerous organisms can now enter the cavity, and with the associated liquefaction process lead to the clinical appearance of characteristic sputum. When the spirochete and fusiform *M. enter*, gangrene occurs and there is an increase in slough and the sputum becomes fetid. The abscess in the newgrowth differs from the abscess caused by the ordinary primary pyogenic invader, in that in the former there is an inability to react to the foreign invader.

This is due to the fact that the primary necrotic area in the newgrowth is relatively vascular and its cells cannot respond as can normal cells. The result is that there forms a large, irregular, gangrenous, foul smelling cavity which grows in size because of the inability of the tumor to wall it off. This picture is readily visualized on the radiograph and is to be differentiated from the smooth, thick walled cavity of the ordinary pyogenic abscess, or the thinner walled cavity of tuberculosis, or the very fine walled cyst.

The nodular type of pulmonary newgrowth is the rarest. This usually begins as a multiple number of vaguely defined, small areas of infiltration. The lesions closely resemble a bronchopneumonia but they are usually unilateral. The nodules tend to grow and coalesce to form larger irregular areas which are very likely to break down and form abscesses. The tumor, in this advanced stage, must usually be

differentiated from a diffuse bronchiectasis with marked associated pneumonitis. The length of history and use of lipiodol to demonstrate the bronchiectatic cavities and bronchoscopic examinations will make the diagnosis.

Before concluding, it is well to reiterate that the diagnosis of primary malignancy of the lung is by no means a rare one and that it is not primarily a radiographic diagnosis. At the present time, no one, how-

ever competent, is justified in making a diagnosis from the radiograph alone. It is true that the roentgenologist can go far toward making a correct diagnosis by the discreet and accurate use of the Bucky diaphragm and bronchography, but it is also very evident that a complete knowledge of the differential clinical findings and of the pathological changes that take place is absolutely necessary before a logical scientific conclusion can be attained.

PRIMARY CARCINOMA OF THE LUNG—PATHOLOGY

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Because of its peculiar behavior, unusual morphology and apparently increasing incidence, primary pulmonary malignancy constitutes an interesting lesion and a subject profitable for study. It is generally understood that these neoplasms are epithelial in character and of three types: squamous cell carcinoma, adenocarcinoma, and a small celled tumor which has been popularly referred to as "oat-cell" carcinoma. The latter has in the past been thought to be a sarcoma. In attempting to explain the presence of these three types of carcinoma in the lung, it has been said that adenocarcinoma is derived from peribronchial mucous glands, "oat-cell" carcinoma from a specific basal cell in the bronchial mucosa and squamous cell carcinoma from metaplastic epithelium that frequently occurs in inflamed bronchi. Instead of considering differences in cell types as distinct entities, it now seems preferable to recognize them as stages of differentiation of the same neoplastic process. Differentiation is the greatest fundamental quality of tumors. Whether the component cells are fully differentiated or not determines whether it is malignant or benign. Upon the stage or degree of differentiation depends the degree of malignancy and of radiosensitivity. All primary lung cancers probably arise in the wall of the bronchus and will be referred to as "bronchiogenic." They are theoretically derived from an immature parent cell in the bronchial wall, the presence of which represents a defect in cell development. In its completely undifferentiated form it is a small spherical cell. As it proceeds along the pathway of differentiation this cell becomes elongated, oval and even spindle-shaped. Neoplasms derived from cells in this zone of differentiation represent the so-called "oat-cell" tumors or poorly differentiated carcinoma and will henceforward in this discussion be referred

to as *undifferentiated carcinoma*. At a certain point differentiation proceeds in two entirely different directions. The most frequent course is toward the formation of squamous epithelial cells and, considering the embryological development of the bronchus, constitutes a reasonable biological expectation. The other direction is toward the formation of columnar cells arranged in glandular or papillary patterns. These cells may be mucin-secreting. In a few the pattern resembles alveolar arrangement in the lung and hence the term alveolar carcinoma is occasionally encountered. However, the group, despite minor variations, should be termed adenocarcinoma. Squamous cell and adenocarcinoma are quite similar in their pathological and clinical behavior and could very well be considered together as *differentiated carcinoma*.

In support of the belief as expressed by Weller in 1929 that classification of bronchiogenic carcinoma is dependent upon differentiation, it is not rare to find more than one stage of differentiation in the same tumor or to find that differentiation into both squamous cell and adenocarcinoma has occurred side by side. The lesions encoun-

PRIMARY CARCINOMA OF THE LUNG—BRINES

TABLE I. COMPARISON OF THE TWO MAIN TYPES OF BRONCHIOGENIC CARCINOMA

<i>Undifferentiated (Oat-Cell)</i>	<i>Differentiated (Adeno- and Squamous)</i>
1. Small lesion usually located near hilum.	1. A more bulky lesion frequently some distance from hilum in center of lobe.
2. Necrosis rare.	2. Necrosis frequent, producing cavitation.
3. Usually metastasizes early.	3. Frequently no metastasis.
4. Fairly radiosensitive.	4. Comparatively radioresistant.
5. Not usually adaptable to surgical treatment.	5. Surgical treatment applicable in some cases.
6. Often infiltrates or metastasizes to outlying portions of same lung.	6. Usually remains localized but aspiration metastasis to opposite lung may occur.
7. Rarely ulcerates bronchial mucosa.	7. Usually ulcerates bronchial mucosa.
8. Infiltrates bronchial wall and peribronchial tissue producing stenosis.	8. Proliferates into bronchial lumen causing obstruction (and atelectasis).
9. Bronchoscopic biopsy frequently impossible.	9. Bronchoscopic biopsy usually easily obtained.

tered in this series have classified as follows:

Undifferentiated	31
Squamous cell	27
Adenocarcinoma	6
Combined forms	5
Total	69

There are important differences between differentiated and undifferentiated bronchiogenic carcinoma which affect both diagnosis and treatment. These differences are tabulated in Table I. The importance of a bronchoscopic biopsy to determine cell type can readily be seen.

The distribution of metastases in thirty-five autopsied cases is given in Table II. The tracheobronchial lymph nodes are most frequently involved. In six of the thirty-five cases no metastasis was demonstrable; five of the six were differentiated carcinoma (adeno- or squamous cell). In this group surgical treatment should receive more serious consideration. While undifferentiated carcinoma is more radiosensitive and should be successfully treated by irradiation, espe-

cially deep x-ray therapy, this advantage is lost by the fact that metastasis in this type is usually widespread and occurs early. Metastatic tumors in the brain and bones have been operated upon as primary tumors.

All bronchiogenic carcinoma can be classified into differentiated and undifferentiated carcinoma. A more elaborate and complicated classification is unnecessary.

TABLE II. METASTASIS
(IN 35 CASES AUTOPSIED)

Mediastinal lymph nodes	26 or 77%
Liver	18 or 52%
Abdominal lymph nodes	9 or 24%
Kidney	7 or 20%
Adrenals	4 or 12%
Opposite lung	4 or 12%
Brain	3 or 8.5%
Bone	}—each
Pancreas	
Spleen	
Thyroid	1 or 3%
No metastasis (differentiated)	5 or 14%
No metastasis (undifferentiated)	1 or 3%

TREATMENT OF CARCINOMA OF THE LUNG*

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In the treatment of pulmonary cancer, two procedures occupy a prominent part: the surgical procedure, consisting of lobectomy or even complete pneumectomy, and the radiologic procedure, consisting, as a rule, of a combination of roentgen therapy and intrabronchial application of radium.

The surgical procedure is a comparatively recent one, and further accumulation of statistical data is necessary before any conclusions can be drawn as to its merit. Even so, the discussion as to its value exceeds the scope of the present paper, and therefore it must be left in more competent hands.

The radiological procedure has now been used more or less routinely for a period of fifteen years. Due to development in technical application and especially in the construction of more powerful roentgen apparatus, certain evolutionary changes have occurred from time to time, resulting in improvement of the clinical results but, as a whole, the procedure has remained unchanged as far as the fundamental principles are concerned. Thus in irradiating a pulmonary neoplasm, especially, two factors must be taken into consideration: first, the primary response of the tumor cells to radiation, and, second, the effect of the radiation on the neighboring structures such as the lung. While the first is concerned chiefly with the radiosensitivity of the individual tumor, the second factor is of paramount importance because of the possibility of producing a permanent fibrosis in an organ of vital capacity.

The majority of the primary intrathoracic carcinomata are of the desmoplastic type and consequently they possess a limited radiosensitivity. This means that rather large doses must be administered at the site of the lesion to produce complete destruction of the tumor cells. In the early cases, the repeated application of deep roentgen therapy and the intrabronchial use of radium sometimes leads to healing. In the advanced cases, however, a temporary reduction in the size of the tumor is all that can be expected. Because of this very slow response to irradiation, our attention often must be centered chiefly on the second factor, that is, on the effect on the surrounding structures. The fact that the irradiated lung responds with fibrosis is of considerable aid in this respect, and we have repeatedly succeeded in bringing about an arrest of very

extensive carcinomata lasting for a period of several years simply by administering a dose large enough to produce a permanent fibrosis of the lung irradiated.

In conforming with the above fundamental principles the method of procedure in treating a pulmonary carcinoma by means of irradiation is as follows: if the carcinoma is localized and not too bulky, its area, as well as the adjacent lymph nodes, is included within the irradiated volume and the cross-firing is so directed as to leave as much as possible of the normal lung outside of the radiation fields. To be able to produce such a situation, it is desirable to make use of very penetrating roentgen rays which permit the administration of a large dose at the site of the lesion. In this respect, the so-called supervoltage roentgen therapy has a decided advantage over the deep roentgen therapy, and this no doubt accounts for the improvement in the results during the past three or four years since the former method is being used. A further increase of the dose is obtained by the intrabronchial application of radium tubes or needles, which are placed directly opposite or around the primary carcinoma so as to produce a more efficacious radiation effect. This entire procedure, if localized to a comparatively small area within the thorax, may be repeated for one or two additional series at intervals of two to three months with safety until a complete destruction of the carcinoma has occurred. If the tumor, however, is more bulky, invading rather large parts of the lung, the intrabronchial application of radium appears futile and in such instances our aim must be to produce a complete fibrosis of that part of the lung, or even of the entire hemithorax by resorting to external roentgen therapy alone.

The following complications may arise as the result of intensive irradiation:

*Read before the Section on Radiology of the Michigan State Medical Society, Detroit, September 23, 1936.

1. *Hemorrhage.* As is well known, hemorrhage forms one of the most frequent fatal issues of all pulmonary neoplasms. Following radiation therapy, due to the destructive effect of the rays, an increased danger of hemorrhage exists for a period of three to four weeks. Later, however, after the onset of fibrotic changes the danger of hemorrhage is reduced to a minimum.

2. *Rupture of the lung.* In comparatively rare instances, the necrosing of a tumor due to the effect of radiation may result in rupture of the lung with consecutive pneumothorax. Such a complication does not represent a very serious sequela, the pneumothorax, as a rule, absorbing spontaneously.

3. *Fibrosis of the lung.* This change always occurs following the administration of a large dose of roentgen or radium rays and therefore it is important that the irradiation be limited over a volume as small as possible. If, through unnecessary cross-firing of both lungs, a diffuse fibrosis of the entire lung parenchyma should follow, such a complication might lead to a very disastrous outcome. A complete fibrosis of one hemithorax has been well supported in our patients over a long while, the longest observation now dating for fifteen years.

A few case reports are included in brief résumé, merely to illustrate the method of procedure.

Case 1.—J. G., male, age 44. During the winter of 1925, the patient developed a dry, hacking cough and repeated attacks of small hemoptyses. In April, 1926, roentgenographic examination revealed atelectasis in the right apical region and bronchoscopic examination made soon afterward by Dr. Chevalier Jackson showed that there was an obstructive tumor of the right upper main bronchus with complete occlusion, accounting for the atelectasis. A diagnosis of carcinoma was made clinically, and no biopsy was thought necessary. The patient has had two series of deep roentgen therapy in May and July, 1926, with rays obtained with 200 kv. equiv. (1 mm. Cu) and a dose of 130 per cent SUD. A disappearance of the lesion with complete clearing up of the atelectasis followed and the patient continued to enjoy normal health until September, 1934, when he died from a cardiovascular disease. There was no evidence of recurrence of the carcinoma at the time of death.

Case 2. H. W., male, age 31. During the early spring of 1929, the patient developed several hemoptyses and some dry, hacking cough. A bronchoscopic examination made in March, 1929, revealed a papillomatous growth of the right main bronchus from which a biopsy was taken. The microscopic report was that of a small oat-cell carcinoma. The lesion was so small that it could not be detected on roentgenographic examination. It was decided to use deep roentgen therapy, cross-fired over the root of the right lung, and intrabronchial radium. The roentgen therapy was carried out with rays obtained

with 200 kv. equiv. (1 mm. Cu) and the dose was calculated so as to reach 110 per cent SUD at the site of the lesion. The radium was placed in the form of a tube intrabronchially opposite the lesion, the dose being 350 mg.-hrs. The irradiation as a whole was repeated for two series, the first being given in May, 1929, and the second in July, 1929. Soon after the completion of the second series, the patient made a full recovery and has remained well. Repeated checkup bronchoscopic examination failed to reveal evidence of recurrence of the carcinoma.

Case 3. F. Y., male, age 40. In November, 1931, the patient developed a non-productive cough which later was associated with slight elevation of temperature. Roentgenographic examination made in February, 1932, revealed the presence of a small tumor in the right hilar region and a secondary infection extending over the area of the right lower lobe. Bronchoscopic examination made soon afterward showed that the tumor originated from the right main bronchus. A biopsy was taken and the microscopic report was that of a very malignant small oat-cell carcinoma of the bronchus. Two series of radiation therapy were administered, the first in March, 1932, and the second in June, 1932. On each occasion, a combination of deep roentgen therapy and intrabronchial radium was used. The deep roentgen therapy was carried out with 200 kv. equiv. (1 mm. Cu) and the dose amounted to 110 per cent SUD at the site of the lesion. The radium was applied in the form of a suitable tube which was placed directly opposite the lesion, the dose amounting to 600 mg.-hrs. Soon after the second series of treatments, there was disappearance of the carcinoma, with complete clearing up of the secondary infection of the right lower lobe area. Repeated bronchoscopic examinations since then have failed to reveal any evidence of recurrence and the patient is enjoying normal health at the present time.

Case 4. F. W., female, age 36. The patient had a dry hacking cough for only three weeks. Bronchoscopic examination made the beginning of June, 1934, revealed a small tumor on the posterior wall of the right main bronchus, a portion of which was removed for biopsy. The microscopic findings were those of cylindrical cell carcinoma. Roentgen examination of the chest showed increased infiltration at the right root of the lung. Two series of radiation therapy were given, the first in June, 1934, and the second in October, 1934. A combination of supervoltage roentgen therapy and intrabronchial radium was used on each occasion. The former was carried out with rays obtained with 500 kv. equiv. (7 mm. Cu) and the dose amounted to 130 per cent SUD at the site of the lesion. The radium dose was 500 mg.-hrs. Soon after the second series of treatments, all the symptoms disappeared and the patient has regained her normal health. Repeated checkup examinations since then have shown no evidence of recurrence or metastases of the carcinoma. A slight amount of fibrosis of the right lung has developed as the result of the irradiation.

Case 5. F. A., female, age 38. The patient developed a cough with moderate expectoration in 1926. Repeated roentgen examinations of the chest revealed the presence of bronchiectasis. In April, 1934, the cough became more marked and there was some hemoptysis. Bronchoscopic examination made in June, 1934, revealed a tumor of the right main bronchus which on microscopic examination proved to be cylindrical cell carcinoma. A phrenicectomy was done in June, 1934, for the treatment of the bronchiectasis and a week later radiation therapy was instituted. This was carried out with a combination of supervoltage roentgen therapy and intrabronchial radium. The quality of the roentgen rays was that obtained with 500 kv. equiv. (7 mm. Cu)

and the dose was calculated so as to amount to 130 per cent SUD at the site of the lesion. The radium dose was 500 mg.-hrs. Two series of treatments were given as a whole, the first the end of June, 1934, and the second in October, 1934. The patient rapidly regained her normal health, the cough has completely disappeared and repeated examinations since that time showed no evidence of recurrence of the carcinoma. A slight amount of fibrosis of the right lung has developed as a result of the irradiation.

Case 6. H. J. C., female, age 47. During the summer of 1930, the patient developed a dry hacking cough and a gradually increasing shortness of breath. She was examined at various institutions and a diagnosis of right sided pleural effusion was made. On December 16, 1930, the pleural effusion was aspirated and an artificial pneumothorax produced for roentgenographic diagnostic purposes. Stereoscopic films revealed the presence of several nodules scattered throughout the surface of the right pleura. Soon afterward, an enlarged gland developed in the right axilla and this was removed for biopsy. The microscopic report was that of an advanced medullary carcinoma. After numerous other clinical investigations, it was decided that the primary lesion was within the chest, most probably originating from the right pleura, and treatment was started on this basis. A combination of colloidal lead therapy, administered intravenously, and deep roentgen therapy over the right hemithorax was used. The dose was calculated so as to be large enough to produce a complete fibrosis of the structures of the right hemithorax. The quality of the roentgen rays was that obtained with 200 kv. equiv. (1 mm. Cu) and the dose amounted to 150 per cent SUD throughout the irradiated volume. The first series of treatments was given in December, 1930,

and the second in February, 1931. The patient made a slow but gradual recovery and had regained her health by the spring of 1931. A complete fibrosis of the structures of the right hemithorax has developed. Periodical examination since that time revealed that the lesion remained well controlled. In September, 1932, a destructive process was discovered involving the anterior end of the 7th rib on the left side and a similar process in the left ilium. It was assumed that these lesions represented a metastatic invasion of the carcinoma and therefore a third series of treatments was given in September, 1932, and a fourth series in January, 1933, over the metastatic areas. There was a very satisfactory response. Checkup examinations made between 1933 and 1935 showed no evidence of new manifestation of the carcinoma and the patient continued to enjoy good health.

Radiation therapy, in the form of roentgen and radium therapy, constitutes a powerful agent in the treatment of pulmonary neoplasms. A tabulation of nearly 100 cases treated in the Radiologic Department of Harper Hospital shows that a five-year survival has been obtained in 8 per cent of the total cases and that in another 10 per cent the survival amounted to from two to five years. Obviously these figures are still very low, but if one considers that until now the mortality has been 100 per cent, there can be no doubt that some progress has been achieved in the control of this very fatal disease.

CANCER OF THE LUNG: HISTORICAL AND MEDICAL ASPECTS

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In considering cancer as a whole, reliable statistics show that each day 350 people in the United States die of some form of it. Of this number at least 10 per cent or thirty-five deaths are ascribable to cancer of the lung. In relative frequency it ranks next to cancer of the genito-urinary organs.

Up to 1920, cancer of the lung was constantly being confused diagnostically with tuberculosis of the lung and with bronchiectasis. Occasionally syphilis of the lung entered the picture, hence there resulted confusion worse confounded. A short time after this the advent of the x-ray in pulmonary diagnosis commenced rapidly to clarify the picture, and, with bronchoscopy to lend its invaluable aid, diagnostic technic became a fixed quantity, so that the result was a correct evaluation of various signs and symptoms occurring in chronic pulmonary infections.

With these aids in the clarification of the diagnostic picture, a great impetus was given to the study of lung cancer. Up

to about 1920, the disease was practically never discovered except at post-mortem examination. Even yet all too many of the sufferers from lung cancer die without a correct diagnosis being made. Yet with the refinements of diagnostic technic which we now possess, the quota of these unfortunates is growing rapidly smaller and correct diagnoses rapidly greater.

Here in Detroit at the Receiving Hospital,

an average of eleven cases has been reported annually for the last five years. The other hospitals of the city by adding their quota would give a very respectable number of cases known in this one community. The most encouraging part of the picture, both locally and throughout the civilized world, is the marked increase in early diagnoses with a subsequent increase in the frequency of cure.

As a final argument showing the great advance in the interest in and studies of this disease, it may be reported that each year since 1924 the International Medical Annual of Wm. Wood and Co., a recognized authority in the Medical Press, has in its review of diseases, published one or several articles on the diagnosis, pathology and treatment of lung cancer. It would appear, then, that advances and refinements in clinical diagnosis in lung cancer, just recorded, may account in part at least for the startling increase in the reports of cases in the Medical Press, and for the equally startling records in the mortality tables of the nation and of the world.

However, many observers feel assured that there is, in addition to this explanation of the apparent increasing frequency of the disease, a real numerical increase in cases due to some unknown factors. What may these factors be? Here opinions are much divided. Some observers have presented the claims of influenza—that old scapegoat—as an etiologic precancerous activator. These claims, however, lack verification and have met with scant approval.

Again the tremendous increase in cigarette smoking, with the dangers lurking in the chemically treated paper, has been suggested as a possible etiologic factor. And yet, again, others with considerable force have claimed etiologic significance in the finely comminuted tar and asphalt and limestone dust and automobile gases permeating the air of cities and large centers of population. It is certainly true and may be noted here that this disease is an urban disease where these irritant factors are often of major importance. Tar, indeed, has been studied exhaustively in this connection and in relation to skin cancer. Its guilt has not been proven but etiologically it and its allied group are under grave suspicion.

Anatomically, this is usually, in its early stages, a right bronchus disease, localizing

at the junction of a main bronchus with the trachea. This is the "bronchogenic type," the usual type. A much rarer type is found elsewhere in the parenchyma of the lung and represents the "parenchymatous type." Bronchoscopically the location of the growth near the trachea aids markedly in the ease of early examination, and permits usually a biopsy so valuable in doubtful cases. Symptomatically the question is ordinarily a differentiation between dilated bronchi—*i.e.*, a bronchiectasis, a tuberculous lung, and a bronchogenic carcinoma, and at times the differentiation is no easy one. A slight fever, a persistent cough, a marked wasting, middle age, increasing weakness, a sputum often bloody—are symptoms common to all three diseases.

Absence of tubercle bacilli in the sputum will, generally, rule out tuberculosis, while an x-ray examination can be depended on for the elimination of bronchiectasis. 'Tis true that any obstructive growth in a bronchus will produce eventually dilated bronchi and so the issue may be here somewhat clouded, while a bloody pleural serum many at times befog the diagnosis.

With, however, a careful x-ray study, coupled with the invaluable aid of a bronchoscopic view and a possible biopsy, with the pathologist's report, the diagnosis may be considered complete and final. No case should be considered as settled and diagnosed without all of these manifold observations and coördinated conclusions. No disease better illustrates the value of team work; no team work was ever more judiciously applied.

A study by two Englishmen, Dudgeon and Wrigley, during the past year, suggests one other valuable approach to an easy and correct diagnosis. These observers report having found cancer cells in the sputum of 68 per cent of the cases of proven cancer examined. If these findings are confirmed, particularly in the early stages of this disease, the value of this method will be great. A confirmation of the findings by other observers is eagerly awaited.

In prognosis the outlook becomes more encouraging. If we can develop a larger cancer consciousness and optimism in the average doctor, and a better optimism among the laity with reference to early diagnosis and treatment; and if we can discover, as we undoubtedly ultimately will, the chief

exciting causes of cancer of the lung, then we can assuredly render a real service to the patient.

The question of eugenics looms up very large in lung cancer. A thoughtful reference to any of the many recorded cancer families will suggest Mendelian characteristics in the mismating of couples with the dominant cancer characteristics. This, of course, is a matter of education of the doctor in the field, and of the laity.

An allusion to the splendid work done in the control of tuberculosis by the dissemination of knowledge and by the magnificent coöperation of all public health agencies, has resulted in the last thirty years in reducing tuberculosis from its rank as first in the causes of death throughout the world to the position one time occupied by cancer, namely, the sixth place. Today, cancer, being without any aid from the sources which did so much for tuberculosis, has risen rapidly in importance until it occupies second place in the causes of death.

An approach to the subject of cancer and an attack similar to that on tuberculosis should meet with an equally successful result.

In conclusion, let me present to you two illustrative case histories taken from our files in Receiving Hospital.

The first demonstrates one of the difficulties encountered in making a complete examination, and hence an undoubted diagnosis, in certain cases of the disease under consideration. As I have said before, it is my firm conviction that no diagnosis upon cancer is complete without a bronchoscopic pathologic examination including the biopsy. If the work of Dudgeon and Wrigley proves to be conclusive and is generally confirmed, it will be quite possible to eliminate from the examining picture the biopsy and the subsequent pathologic examination and will result in a much simpler diagnostic technic.

The first case occurred in a white man, aged sixty, believed to be of Slavic origin. He was a laborer by occupation and at his work, January 28, 1936, caught a severe cold. He reports that ever since then he has a cough, productive of thick, yellow, odorless sputum frequently streaked with blood. He had constant dull pains in the right chest which were aggravated by coughing. He had no dyspnea, no chills, slight fever (never higher than 101 degrees), no night sweats, but in three months he had lost 15 pounds. The family history gave no important findings and his past history revealed the fact that he had very frequent chest colds since youth. He had never had previous hemoptyses, nor pleuritic pains. His pulse was rapid,

between 90 and 100, and his respiration 20 to 25. He looked emaciated and decidedly unhealthy.

On examination there was a marked diminished excursion in the right chest. His trachea was drawn towards the right, and a marked dulness with distant bronchial breath sounds and bronchophony, associated with crackling râles, were heard over the upper part of the chest. The rest of the lung fields were negative and the sputum was negative for tuberculosis. Under fluoroscopic examination, the right lung showed a dense opaque shadow beginning at the right hilum and extending out towards the periphery. The x-ray diagnosis was carcinoma of the right main bronchus and reference of the patient was reported to the bronchoscopist. Later this gentleman reported the finding of a growth at the junction of the right main bronchus with the trachea, making the lumen of the tube so small that it could not be entered for biopsy. Notwithstanding this setback, the patient was treated as a case of lung cancer and was referred for x-ray treatment.

Further report has not yet been received as to the efficacy of the treatment of this case, but the bronchoscopist insists that the growth will probably and shortly extrude itself into the lumen of the trachea, where it will be easy to perform a biopsy and to make once for all the conclusive diagnosis.

The second case illustrates very well the possibilities that lie in radiation for this disease. The attitude of despair that was so common in regard to it two decades ago has been supplanted, as this case will illustrate, by an attitude of hope.

This patient, a white man, aged forty, policeman by occupation and an American by birth, was admitted to the Receiving Hospital in February, 1932. His illness began with chills, fever and cough, three months before admission. He was confined to bed for one week, when the fever disappeared but the cough persisted. He had a productive odorless purulent sputum which shortly changed to a sputum streaked with blood. He had, shortly after this, a recurrence of chills and fever with an increasing severity in his cough. He was confined to bed a month until his admission. At that time he reported much weakness and a marked loss of weight. His past history was negative as he had always been a healthy man and his family history gave no suggestion of an hereditary or communicable disease. On examination there was disclosed a dulness and diminished fremitus over the right chest with distant bronchial breathing, bronchophony and coarse moist râles in the right base. The remainder of the lung fields was clear.

The x-ray report showed a circumscribed consolidated area over the right base with a small amount of fluid in the pleura and with no cavitation. The bronchoscope showed a fungating mass in the right lower bronchus just below the orifice of the middle lobe bronchus. Beyond this there was found considerable pus. A portion of the mass was removed through the bronchoscope and referred to the pathologist, who reported "an oat-cell carcinoma of the right bronchus."

The treatment given was intensive deep x-ray therapy.

Result: This patient has been under observation ever since the date of admission, 1932. He reports himself as well, working regularly, and symptom-free at present. A very recent radiograph was taken and no evidence of cancer was found. This seems highly reassuring after five years of examination and treatment.

SYNCOPE AS A RESULT OF CIRCULATORY DISORDERS*

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The loss of consciousness, even when transient, and certainly when persistent and profound, is a fear-inspiring symptom complex and demands prompt diagnosis and treatment. A syncopal attack is a matter of serious moment, not only to the afflicted individual himself but often also to others whose safety is jeopardized by the abrupt incapacitation of one in a responsible position. Considerations of this sort prompted me some ten years ago to begin a study of the causes of sudden disability as determined in the Emergency Service in a large hospital, as La Charité in New Orleans. The result of this study, covering the five years 1926 to 1930 inclusive, may be worthy of consideration, even though the data were collected in the Deep South and in part previously reported to the Railway Surgeons.¹ The statistics from a metropolitan center in the South will not list heat stroke cases as one might expect to have in St. Louis or even in Detroit, for such cases are very rare in New Orleans, but may contain cerebral estivo-autumnal malarial comas that are not often seen in the North.

A survey of these statistics with these geographic climatic differences in mind will serve to indicate roughly what are the most common conditions to be suspected in a comatose patient and what lines of investigation are most promising. It is of especial interest to note that cardiovascular disease and neurological conditions, if we include apoplexy, together outrank trauma, the leading single cause of coma.

It is thus evident that medical conditions and particularly cardiovascular diseases, to a discussion of which this clinic is to be devoted, play an important role in the production of unconscious states.

The Clinical Picture

The onset of syncope is usually precipitate, but giddiness, vertigo, weakness, visual disturbances, unsteadiness, restlessness, confused speech, drowsiness, yawning, nausea and vomiting and, in some types of cases, headache, loss of memory, inability to concentrate, aphasia, paresthesia and paralysis may precede the loss of consciousness, convulsions or coma. The adjective "cerebral" may be properly used to designate the type of syncope with which we are dealing, for syncope itself indicates the "cutting off" usually of the blood flow. This may happen in an extremity as in Raynaud's phenomenon and in the heart as in the obso-

letely termed "syncope anginosa," as well as in the brain as "syncope cerebri."

TABLE I

ANALYSIS OF A SERIES OF 500 CONSECUTIVE CASES OF UNCONSCIOUSNESS ADMITTED TO THE EMERGENCY ROOM OF CHARITY HOSPITAL, NEW ORLEANS, 1926 THROUGH 1930

1. TRAUMA—Cerebral Concussion, Contusion, Compression with or without Skull Fracture	167
2. CARDIOVASCULAR DISEASE or DISORDERS	178
Cerebral hemorrhage or thrombosis....	123
Cerebral angiospasm or anemia and cardiac disorders or disease.....	55
3. ACIDOSIS (Diabetes mellitus).....	52
4. UREMIA (Eclampsia)	30
5. MENINGITIS—Meningococcic, Tbc. E-A Malaria	21
6. PNEUMONIA—Pneumococcus	15
7. POISONING—Alcohol, Dope, Barbiturate, Lead, Miscellaneous	18
8. ORGANIC BRAIN DISEASE—Paresis, tumor	8
9. EPILEPSY	7
10. UNDETERMINED	4

The Mechanism

Cerebral symptoms, rarely lasting more than several minutes, are usually the result of defective blood flow to the cerebral cortex. In certain hypertensive individuals the arterioles may become hyperirritable and upon stimulation constrict and obstruct the blood flow, producing areas of cerebral cortical anemia. In such episodes evidences of an angiospastic state may sometimes be seen in similar constriction in the arterioles of the retina. Although this defect may be of local origin, as a rule general circulatory changes and a sudden fall in the systemic blood pressure are present. The critical level of blood pressure to insure adequate circulation in the standing normal individual is between 60 and 70 mm. of mercury. An arteriosclerotic cerebral vascular system

*Presented before the Michigan State Medical Society, Harper Hospital, Detroit, September 22, 1936.

requires a higher systemic pressure to maintain sufficient blood flow into the cerebral vessels.

The fall in blood pressure may be the result of either (1) a primarily decreased inflow of blood to the heart, or (2) primarily a decreased output from the heart, with in either case a lowered systemic pressure.

1. The *venous return to the heart may be impaired* following splanchnic vasoparesis with engorgement and active dilatation of this great vascular bed to the point where much of the patient's blood volume is static in the splanchnic venous sinusoids, the systemic pressure drops and cerebral anemia results. This is the mechanism of the usual or ordinary faint.

Shock either of psychogenic or emotional, traumatic or physical, or of toxic origin dams blood in the periphery and reduces the venous inflow. A *postural* or *orthostatic hypotension* in which the reflex peripheral vasoconstriction upon arising is not effective may be the cause of the syncopal attacks. *Vasodilating drugs* such as amyl-nitrite, nitroglycerine, and sodium nitrite may act similarly. The *hypokinetic* type of *heart failure* such as one encounters in overwhelming infections and hemorrhage, as well as in nitrite poisoning and in medical and surgical shock, may so diminish the blood supply to the brain as to give rise to syncopal attacks.

2. In the other great group of cerebral anemia cases a *decrease of the outflow of blood from the heart* causes a critically low blood pressure. Among the less serious causes of low cardiac output are the cardiac mechanism disturbances of unusually rapid rates and consequently short diastolic periods such as paroxysmal tachycardia, fibrillation and flutter. The paroxysms of these disorders as a rule are accompanied by a sharp drop in the systemic blood pressure.

Abnormally slow heart action likewise, especially when it appears suddenly as in the sino-auricular standstill of the carotid sinus reflex origin or auricular-ventricular block with ventricular asystole or ventricular fibrillation precipitating Adam-Stokes attacks all cause serious drops in the blood pressure that so reduce the cerebral circulation as to cause syncope.

A fleeting giddiness or vertigo or faintness may result from an asystole of 2 to 3

seconds duration. A momentary swoon usually follows 10 to 20 seconds of ventricular standstill, while longer periods of suspension of heart action results in syncope, convulsions and coma after 90 to 120 seconds.

Organic obstruction to blood flow out of the heart as result of calcareous disease at the root of the aorta, or valvular stenosis and regurgitation or aneurysm or arteriosclerotic degeneration and hardening of the cerebral vessels are definitely predisposing to cerebral anemia. A slight drop in the blood pressure incident to any one of the many causes outlined would precipitate a syncopal attack. As pointed out by Marvin² the carotid sinus reflex is frequently hyperactive in the presence of such vascular pathology and therefore cerebral episodes are common in aged individuals. A ball valve thrombus in a mitral funnel may obstruct the flow into the left ventricle and cause a drop in blood pressure to the critical levels.

A Diagnostic Approach

In the study of any patient in coma or recovering from a syncopal seizure (1) a swift general survey is in order, followed by (2) neurological and (3) cardiovascular examinations.

1. *General survey.* The patient's *color* should be noted with particular reference as to whether there is a rapidly increasing pallor or flushing or cyanosis or beads of perspiration about the facies. A search should be made for *evidences of trauma*, scalp lacerations, bruises, depressions or fractures of the skull and attempts should be made to determine whether the trauma was administered before the faint or after the patient fell out. Burns on the lips or mucous membranes or a *lead line* on the gums may give the clue to the cause of a coma (Marshall).

Odors such as the aroma of alcoholic beverages, acetone or other poison should be investigated. If there is suspicion of any odor the gastric content should be removed and examined.

The character of the *respiration* should be noted, whether slow, deep, sighing or Kussmaul of Cheyne-Stokes or Biot's irregular breathing may be present.

Neurological Examination

The eyelid reflex of defense closure should be tried on each side and in vari-

ous quadrants of the visual field, the pupils should be examined for size, equality and light reaction. Conjugate deviation of the eyes to the opposite side on forced moving of the head indicates oculomotor paralysis. Supra-orbital pressure normally elicits equal facial muscle response, the lower eyelid moves upward. Examination as to whether there is a loss of conjunctival or corneal reflexes should be carried out as well as an ophthalmoscopic study of the ocular fundi for angiospastic retinal arteries or sclerosis. The discs should be examined for papilledema and the retinae for exudate.

A general clamminess of the skin may be noted. Frothing at the mouth and biting of the tongue are common in epilepsy. The blowing out of one cheek or the drooling of saliva indicates facial paralysis. By raising and allowing to fall each of the extremities, the tonus or flaccidity of the paralyzed side can be made out. In a severe state of collapse the flaccidity is general and sphincter control may be lost or general hypertonic postures may be assumed. The superficial abdominal and cremasteric and the deep reflexes may be absent, exaggerated, symmetrical or unequal. The tonus reflex of the neck, the Brudzinski and Kernig's signs may be present. The involuntary reflex thumb extension and opposition on finger flexion (Mayer-Stiefler) normally present persists in hysteria but disappears in cerebral paralysis and epilepsy in which the Babinski appears while the Achilles tendon, pupillary and corneal reflexes may not be elicited.

Cardiovascular Examination

The signs of greatest significance are usually to be found in the study of the heart action and blood pressure. A disturbed cardiac mechanism may result in a rapid or slow heart rate or a transient total absence of the heart beat. Auscultation may reveal the presence of murmurs of an acute or chronic valvulitis. The blood pressure, in instances of cerebral vascular accident, may be high or may be alternating but usually temporary or permanent hypotension is to be found.

Discussion of the Clinical Analysis of Cardiovascular Causes of Syncope

Table I emphasizes the importance of cardiovascular diseases or disorders as causes for unconsciousness. A more de-

tailed follow-up study of this group seemed desirable and was carried out. The results of the further analysis are set forth in Table II.

It will be seen that *local circulatory disturbances* involving the cerebral arteries dominate the group and stress the importance of blood pressure, eye grounds and neurological examinations.

TABLE II
FURTHER DETAILED STUDY OF THE
CARDIOVASCULAR SYNCOPE GROUP

Local Circulatory Disturbances	
Cerebral Hemorrhage	98
Cerebral Thrombosis	23
Cerebral Embolism	2
Cerebral Angiospasm	2
Encephalopathy Hypertensive	8
General Circulatory Disorders with Low Blood Pressure	
Massive Pulmonary Embolism (Cor Pulmonale)	2
Dissecting Aortic Aneurysm.....	1
Rupture of Heart.....	1
Extensive Coronary Thrombosis.....	1
Ruptured Aortic Valve.....	1
Ruptured Aortic Aneurysm.....	4
Aortic Stenosis—Calcereous	3
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The general circulatory disorders with low blood pressure account for relatively few of the attacks of syncope. Nevertheless the recognition of each disorder in the miscellaneous group of causes of syncopal states is desirable.

Hypotension and cerebral anemia sometimes result from such acute vascular accidents as pulmonary embolism, dissecting aortic aneurysm, coronary thrombosis, rupture of an aneurysm or of the heart or of an aortic cusp.

A few instances of aortic stenosis and calcareous disease and mitral stenosis with a ball valve thrombus or cardiac tamponade of traumatic or hemorrhagic origin, or as a result of acute pericarditis will account for occasional instances of syncope. Such a survey indicates the necessity for a general cardiac as well as a general vascular examination in every patient who has a history of faints or fits.

Cerebral anemia as the result of an ordinary splanchnic faint, although a very common condition, is seen in the emergency room of a general hospital only occasionally. Postural or orthostatic hypotension is an occasional cause of cerebral anemia.

All the disorders thus far mentioned are usually accompanied by a sharp drop in the systolic blood pressure with concomitant cerebral anemia of such grade as to cause unconsciousness.

Cardiac Mechanism Derangements

Sudden cardiac mechanism derangements although really not very common causes of coma occur with sufficient frequency and at times with such dramatic severity and are therapeutically so promising that prompt proper diagnosis and emergency treatment are often necessary to forestall a catastrophe. Inasmuch as many of these pathophysiological causes of cerebral syncope are comparatively benign or innocuous conditions and most of them amenable to simple specific treatment, some emphasis on the differentiation and management of the mechanism disturbances may be worth while. Certain clinical characteristics and the usual favorable response to therapeutic procedures of these disorders even though quite well and generally known warrant recapitulation from time to time.

Sinus Bradycardia and Standstill Carotid Sinus Reflex Disturbances

Abnormally active or over active carotid sinus reflexes are fairly frequently recognized, while an abnormally inactive reflex is much less often diagnosed. The so-called vagotonia or vagus faint or sinus block or sino-auricular standstill, the reflex slowing or momentary suppression of the heart action are now generally considered under the term carotid sinus episodes. The heart is usually slow to begin with in the patient subject to carotid sinus attacks and in such a temporary exaggeration of vagus tone produces the sino-auricular standstill and an asystole of the whole heart. The asystolic period usually prolonged to the point of a blood pressure drop to the critical level, results in cerebral anemia and transient unconsciousness intervenes.

The diagnosis of the condition depends on elicitation of an abnormally active carotid sinus reflex upon slight or moderate pressure applied at the bifurcation of the

right common carotid. In vagotonics this maneuver will result in a slowing of the heart and a prompt and complete suspension of the systole for a brief period. An asystolic period may last as long as 13 seconds. Pressure on the eyeballs will sometimes reproduce the sinus bradycardia and standstill. The condition is fairly commonly encountered and I cannot refrain from a brief description of a few striking cases.

Case 1.—A good young woman brought her middle aged husband to me for examination because of peculiar fainting attacks. She related that after the onset of the first winter of married life he began to act peculiarly at the time of his departure from home each morning. To be more specific she said that he actually swooned each morning while she was administering the usual parting unction that newlyweds indulge in. Upon further questioning it developed that she had a habit of drawing his overcoat collar tightly about his neck, clinging with her hands to the lapels, bringing them closely together as she placed a goodbye kiss upon his pale lips. Her firm grip on the collar of his overcoat saved him from falling upon the threshold.

He could of course give no adequate explanation for his action nor could he see any reason for his faint. It was merely a case of over-administration of the final rites of departure which brought pressure to bear upon the irritable carotid sinus which in turn precipitated the asystole and the accompanying cerebral anemia. The attack could be reproduced at will at the heart station and electrocardiographic tracings were made. Re-education of the young wife and the regular use of small doses of 5 to 10 minims of tincture of belladonna three times a day succeeded in abolishing the disturbing reaction and they lived happily ever after.

Case 2.—Another patient related some instances of attacks of fainting that occurred regularly every time he got into a certain barber's chair. He began to feel that this barber had some sort of supernatural influence over him or would hypnotize him or was up to some such mischief. He had tried other barbers in the same shop and had not had similar experience. He was quite surprised to find that his physician could reproduce the spell and at first he was quite suspicious of this occult power. On close questioning he admitted that the barber worked just like any other barber but on further investigation it was found that the fainting always occurred when the barber began stroking the sides of his neck after shaving him and furthermore that the barber was unusually vigorous in the massage of the neck of his patrons. The result of the strong application of pressure to the patient's susceptible carotid sinuses was that the vagotonic reflex was set up and cardiac standstill was inaugurated. A few suggestions to the barber which resulted in the modification of his technic, along with administration of 1/150 grain of atropine three times a day prevented a recurrence of the troubles and reestablished the barber in the patient's good graces.

Case 3.—The third patient was a petty gangster on Treasure Island who had followed somewhat in the footsteps of Jean LaFitte and actually had a rendezvous down the island near the pirate's old oak grove on Galveston Bay. The F-B-I or G-men were apparently giving him the "jitters" but what worried him most was a giddiness and faintness

and actual "falling out" attacks. These occurred on glancing quickly to the side or back, which he was doing repeatedly, perhaps as a defense reaction. Likewise backing his car out unusually rapidly he frequently had an attack of vertigo and sometimes syncope.

After hearing his story dramatically told and surveying his makeup it was quite obvious what the source of his trouble was. He was a member of the old school and still wore the high stiff collars that bound his neck closely and exerted considerable pressure upon his right carotid sinus when he turned his head sharply to the right or backward; as it was his habit to do.

Modernization of his wearing apparel to soft collars and the administration of 1/10 or 1/16 of a grain of novatropine, methatropine or homatropine bromethylate, three times a day controlled his severe attacks. Fortunately for the community, he also had physical signs of aortic stenosis and calcareous disease at the root of the aorta and of the coronary arteries, conditions commonly associated with the exaggerated carotid sinus reflex (Marvin). Similar auriculo-ventricular conduction disturbances later developed that were controlled by larger doses of novatropine. Myocardial insufficiency promptly developed and incapacitated him and finally bore him to his reward.

Tachycardia

Simple sinus tachycardia rarely is the cause of cerebral anemia; it, however, is the common accompaniment of the ordinary splanchnic fainting. The syncope of orthostatic hypotension is usually accompanied by a slow or normal pulse rate, and is thus differentiated. The simple tachycardia rarely presents a heart rate above 140 and it tends to slow gradually and is sometimes slightly irregular after carotid sinus pressure. The patient may complain of some palpitation and nausea just before the onset and at the recovery from the fainting.

In the splanchnic faint with simple tachycardia the blood pressure drops often to the critical level of 80 or 70 mm. of mercury and remains there even with the patient in the prone position and until recovery begins to take place (and before recovery even with the head down the pressure does not go above normal), while in the orthostatic hypotensive case, the falling blood pressure occurs only during standing. The drop can be promptly interrupted by assuming the horizontal position, at which, especially when the head is lowered, the pressure characteristically rises to levels above normal, while the pulse rate does not change in most cases.

The treatment of both types in the acute stage is about the same; placing the patient in the horizontal attitude, lowering the head, dashing cool water, or giving the patient a drink will usually restore him. The postural or orthostatic hypotension faint

may be helped by an abdominal binder to prevent the drainage of blood into the large venous channels when the patient assumes the upright position. Ephedrine sulphate may be given in increasing doses, $\frac{3}{8}$ to $\frac{3}{4}$ grain, or benzedrine sulphate $\frac{1}{6}$ to $\frac{1}{3}$ grain doses may be effective in maintaining blood pressure above the critical level and in preventing the cerebral anemia upon assuming the upright position.

Paroxysmal Tachycardia

The rapid heart action which in the case of paroxysmal tachycardia rises to levels of 160 to 180 per minute are of such grade as to be in themselves factors in the reduction of the systolic blood pressure, but again the drop is rarely sufficient to cause in itself a cerebral anemia. Occasionally, however, especially in elderly individuals with sclerotic cerebral vascular beds, syncope may result in a paroxysm of tachycardia. Giddiness and dizziness are quite common, as in any cerebral anemia, and a sense of general weakness is complained of during the paroxysm by most of the subjects.

The paroxysm consists of a rapid succession of heart beats which have their point of origin outside the usual pacemaker. Usually the ectopic focus is in the auricular musculature and at times in the junctional tissues but more seriously in the ventricular wall. The rapid heart action is usually sudden in onset and sudden in offset. There is often no discernible precipitating factor but occasionally an emotional upset or unusual physical strain or a surgical operation, particularly one upon some part of the genito-urinary tract, is likely to precipitate a paroxysm. The paroxysm may last for only a few beats but usually it continues for several minutes, occasionally for hours, days, weeks and even months. It is rare for any paroxysm other than one of junctional origin to last longer than a day.

The clinical differentiation according to the origin cannot be made with certainty except with electrocardiographic studies. The rates are high, usually between 160 and 260, and the rhythm is usually perfectly regular, especially in the auricular type, while in the ventricular tachycardia a variation of 6 to 8 beats counting from minute to minute is not uncommon, and fairly characteristic. The junctional and ventricular types are far more serious than the auric-

ular paroxysmal tachycardias, for the junctional type is long and the ventricular type is usually associated with serious myocardial damage of the ventricle and cardiac infarction following coronary thrombosis.

Paroxysmal auricular tachycardia often occurs in psychically unstable individuals. Worry and fear may be a great factor in the aggravation of the condition as illustrated by the following case.

Case 4.—A professor from one of our State colleges, aged 50, was sent to me because he was unable to get out of bed without precipitating an attack of racing heart action and fainting and during each day he had from 10 to 12 paroxysms of rapid action. He had been put to bed for a month previously after suffering a very severe syncopal attack in which he had become quite cyanosed and from which he did not recover consciousness for 12 hours. The delayed recovery was probably in part due to the opiate that was administered. In spite of digitalization and aminophyllin therapy he continued to have attacks even while at rest in bed. He insisted that he had no worries, but I could not believe this because of the fact that he was a professor with a family of five children, and had received a 30 per cent salary cut. He later admitted that he had been worried some about his condition, particularly when he did not recover completely, even at rest in bed and upon heart drugs. He had had two previous attacks of syncope and several paroxysms of tachycardia which lasted as long as twelve hours and each of which occurred when he had had a severe emotional upset.

The physical examination showed an anxious individual who presented no definitely pathognomonic signs of heart disease. He did, however, present a rapid pulse of 100 to 120 with frequent auricular premature contractions. His blood pressure averaged 136/77 in both arms at rest in bed, while his cardiac mechanism was regular, while during a paroxysm it dropped to 80/60. The heart sounds, while rapid and tic-tac in character, presented no suggestion of a gallop rhythm. The aortic second sound was slightly accentuated and frequent auricular premature contractions disturbed the sinus tachycardia. Electrocardiograms confirmed these findings and showed low voltage but no pathognomonic signs of myocardial disease.

In view of these findings of a persistent tachycardia I was not absolutely certain that there was no myocardial disease but his local physician had digitalized him and given aminophyllin without relieving him. I therefore concluded that most of his trouble was psychogenic and advised him to get up each morning and remain up. He did this upon my order and fell out regularly each morning and had to be gathered up and put into a chair. After several days of this, I questioned in my own mind my conclusion, but with the patient I displayed only confidence in my decision. Finally after the fifth day the fainting attacks did not recur on arising. This was a victory and the patient with his confidence reestablished in himself and his fear of the attacks allayed has carried on his routine duties for two years with only three pairs of mild paroxysms of tachycardia, each of which promptly stopped after he stretched out horizontally for a few minutes.

Paroxysmal ventricular tachycardia is less common and of more serious moment,

and often follows myocardial infarction. The blood pressure sometimes drops so low that it cannot be determined during a paroxysm.

Case 5.—A diener in the pathological institute, aged 53, suffered a severe attack of pain in the upper chest at about 2 o'clock in the morning. He was brought into the hospital at 5 a. m. in extremis. He had lapsed into unconsciousness, an ashy pallor and a clammy cyanosed skin were noted. He was grunting and groaning with respirations at the rate of forty per minute and quite short and jerky.

His pulse was small, rapid, weak and thready with a rate of 190 per minute and the blood pressure 115/90. The heart was apparently not enlarged and no murmurs were heard, the sounds were weak and embryocardiac. Bubbling râles were heard throughout the chest. The liver was not definitely enlarged and no ascites or edema was present.

Electrocardiograms showed a characteristic ventricular tachycardia, the paroxysms of which lasted for several hours. The heart rate dropped to 120 and normal mechanism with characteristic S T interval and T wave changes or coronary thrombosis were recorded. Orthopnea, cough and the expectoration of frothy blood-tinged sputum were troublesome after the paroxysm subsided. After 24 hours a second paroxysm began and the patient lapsed into unconsciousness and died after two hours. We should have administered quinidine sulphate in 5 grain doses every hour for as many as 7 or 8 hours until the paroxysms were stopped and prevented.

Treatment of Paroxysmal Tachycardia

The carotid sinus reflex is promptly effective, stopping the paroxysm within one beat in about half the cases. The other half of the cases show no effect whatsoever upon the rate. In other words there is a complete change-over, or nothing, as result of this procedure. In some individuals the injection of an opiate or the taking of morphine by mouth allays the anxiety and the paroxysm spontaneously stops. If the patient's life or the life of an extremity is in danger by prolongation or persistence of the high rate and low blood pressure, intravenous injections of 10 c.c. or more of standardized digitalis preparations has been advocated by Wilson. More recently the subcutaneous injection of 20 to 50 milligrams ($\frac{1}{4}$ to $\frac{3}{4}$ grain) of beta-acetyl-methylcholine (mecholy, Merck) has been found successful as apparently a fairly safe procedure. After injection with this drug the carotid sinus reflex tends to be more effective and to stop the paroxysm.

Junctional tachycardias are most refractory to treatment and may persist for months. I have seen one instance following a septic process in the arm and the condition was present for at least fifteen months, at

the end of which time the patient disappeared from observation and was never heard from again.

Ventricular tachycardias are much more serious, more frequently accompanied by blood exudation, frothy sputum and pulmonary edema, especially when complicating a thrombosis of the anterior descending branch of the coronary with infarction of the left heart. Quinidine by mouth in 5 grain (or 0.3 gram) doses every hour for six or seven doses is often effective in stopping the paroxysm. It has been given intravenously in $7\frac{1}{2}$ grain (or 0.5 gram) doses but it is not without danger.

Paroxysmal Flutter or Fibrillation

Syncope is not a frequent symptom of paroxysmal flutter or fibrillation, nevertheless the conditions are to be considered even though only rarely accompanied by unconsciousness. Vertigo and giddiness are commonly experienced. The paroxysmal auricular flutter may produce a very rapid heart rate—as high as 180 beats per minute. Rarely, however, does it go above this level, but a 1 to 1 block may replace the usual 2 to 1 and a rate of 360 per minute may result. It usually averages about 160 beats per minute. The rhythm is perfectly regular and the blood pressure drops and thus producing symptoms similar to but less severe than those of the tachycardias. There may, however, be more weakness associated with this mechanism disorder.

As a diagnostic characteristic, differing from the tachycardias, besides the lower rate, the carotid sinus reflex is usually temporarily effective, that is, pressure over the right carotid sinus usually slows the ventricular rate very sharply and makes the rhythm slightly irregular. In spite of the persistence of the pressure, however, the rapid regular beat is resumed.

In *paroxysmal auricular fibrillation* the symptoms may be quite similar, but usually the irregularity of the heart is felt by the patient and upon examination it is usually found that the heart rhythm is characteristically absolutely irregular and the rate often considerably above 100, while the pulse rate, though irregular, is considerably less, due to the fact that many of the ventricular beats and the rapid runs generate insufficient pressure in the ventricles to

open the aortic leaflets and the pulsus deficit results.

These conditions very frequently stop without any medication whatsoever, and even in spite of digitalization. Here again, however, quinidine sulphate may be necessary to halt the disorder as it is the most effective measure. Usually a few doses by mouth are sufficient to reestablish a normal mechanism.

Ventricular Disorders and Standstill— Adams-Stokes Syndrome

Paroxysmal ventricular flutter or fibrillation are rarely recognized clinically as the cause of a syncopal attack but they, especially fibrillation, are suspected as the cause of sudden collapse and death in electric shock and angina pectoris. Experimentally and electrocardiographically they have been shown to produce a state where there is no propulsion of blood from the ventricles. The diagnosis may be suggested by the fact that no regular sounds are audible, no pulse is present, sharp vertigo and syncope, and often convulsions intervene, creating a clinical picture that is practically indistinguishable from an Adams-Stokes attack. The interpretation of this rare state can be made only by electrocardiographic studies made during the attacks.

Heart Block

The lesser grades of disturbances of conduction in the A-V bundle may result in some giddiness, vertigo, and some slowing of the pulse and heart rate, which are usually equal. The rhythm may be regular or irregular, depending on the type and grade of the block.

The type of heart block that precipitates a cardiac emergency is usually one that is complete and in which the ventricular muscle is not irritable enough to promptly establish a ventricular pacemaker. In other words, there results a temporary asystolic state in which there are no ventricular contractions to propel the blood into the great vessels and the brain. As a result, the cerebral anemia which occurs produces a sudden vertigo which rapidly passes into syncope and a convulsive state often ensues.

The suspension of ventricular activity may continue for as long as four or five minutes. Some consider possible survival of the patient with resumption of ventricular activity after even eight minutes. At any

rate, the moments of ventricular asystole are precious ones and no one is able to state whether or not the ventricle is again going to contract.

Treatment of Ventricular Standstill

In the emergency, rapid powerful blows over the precordium may be of help in the reestablishment of ventricular activity. Intravenous injections of drugs in the peripheral vessels are of little value because the blood mass is not moving. Injection into an engorged jugular with the patient placed in the upright position, may, by gravitation, successfully be carried into the heart. If these yield no response in a few moments, the heroic introduction of two or three minims of adrenalin directly into the heart muscle is justifiable. In order to accomplish this it is usually necessary to penetrate the ventricular cavity and aspirate some blood into the syringe containing 10 to 15 minims of 1/1000 adrenalin solution and then start withdrawing the needle slowly, injecting as the needle is withdrawn. Large doses are dangerous, for they may produce persistent and fatal ventricular fibrillation.

The chief therapy in these conditions seems to be the prophylaxis by keeping the ventricular muscle irritable with barium chloride or ephedrine of synephrine.

A clinical case that presented Adams-Stokes attacks of heart block and later on paroxysms of ventricular origin might serve to emphasize certain significant facts.

Case 6—J. W. aged 66, had noted shortness of breath on exertion and swelling of the ankles after each day's work for four years. Sixteen months before admission while at work he "fell out" for no known reason. Two months later he had another similar attack and a recurrence was suffered at about the same interval. The last one had occurred one month previous to admission. The patient felt that the sensations experienced in an attack were rather indescribable in detail. He only remembered that he began to feel weak, then get short of breath, dizzy and everything would pass into darkness. He would draw together, shake, and his teeth seemed to chatter and he felt as though he were enclosed in ice. The attacks would last only for a minute or two and upon recovery of consciousness he would feel fatigued, and worn out. He had noted that his pulse was slow and

would become weaker and slower when the attacks came on. He had been taking strychnine in large doses for a year to prevent the attacks.

The physical examination revealed evidences of general arterial sclerosis and chronic pulmonary emphysema. The heart seemed to be somewhat enlarged. The sounds were for the most part faint but occasionally louder beats were heard at irregular intervals, while a dominant regular rhythm seemed to prevail. The rate was slow, 40 beats per minute. The rate did not rise after exercise. No murmurs were heard. The blood pressure was 128/50. Electrocardiograms confirmed the diagnosis of complete heart block.

In order to increase the irritability of the ventricular pacemaker and prevent a recurrence of the Adams Stokes seizures, which had previously occurred, the patient was placed on barium chloride, 100 mgm. three times a day. After about two weeks of this therapy the patient began to have more severe and more frequent Adams-Stokes episodes, several times a day. Electrocardiograms taken just after some of these seizures revealed another mechanism disorder, a ventricular tachycardia, flutter and fibrillation in paroxysms along with the heart block. It was surmised that the barium chloride had produced too much of an increase in irritability of the ventricles and the drug was ordered discontinued but the interne failed to carry out the order, and, after another 100 mgm. dose, a severe seizure of what was apparently ventricular fibrillation proved fatal.

Summary

The importance of syncope and coma as medical emergencies has been reiterated.

The causes as encountered in a series of 500 consecutive cases of unconsciousness admitted to the emergency service of a large hospital in a metropolitan city in the deep South have been set down.

The analysis of the cardiovascular group of causes has been carried out in detail and all the causes have been briefly discussed.

The cardiac mechanism disorders that may be held accountable for the syncope have been elaborated upon. Characteristic cases have been cited.

The diagnostic criteria of each and the emergency methods of combating the disturbances have been commented upon.

References

1. Herrmann, George : Sudden disability as a result of cardiovascular disorders. *The Surgical Journal*, July and August, 1927.
2. Marvin, H. M.: An exaggerated carotid sinus reflex in patients with calcareous disease of the aortic root. *Trans. Assoc. Amer. Phys.*, Vol. 50, 1935. 900 Ave. B.

A GRADUATE OF FIFTEEN YEARS AGO LOOKS BACK*

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I realize that no audience ever takes its speaker as seriously as he takes himself. Nevertheless, I think that it is my privilege to feel highly honored in being asked by Dr. Mayo and permitted by his alma mater to deliver the 1937 Mayo lecture. It has been my observation that long speeches, regardless of the subjects dealt with, have a definite sedative action on those who listen; it is my intention to cease talking before my audience reaches the lethargic stage.

The invitation to be present on this occasion was accepted with mixed emotions. First,

I feared I might say something which would be misinterpreted and, second, I feared that I most likely would say nothing at all. I am of the impression that if Dr. Mayo could personally deliver this annual address he would attempt to say those things which might prove of value to you who are now occupying the place in this medical school which he occupied more than fifty years ago. As an assistant and associate of Dr. Mayo, I have had the opportunity and privilege of becoming acquainted with certain of his views. If I were to attempt to make a short summation of why, in my opinion, he has attained such astounding success, I should say it is because he is indefatigable and has constantly attempted to pass on to those young physicians about him, the benefits of his vast experience. When I was his assistant, I was occasionally overwhelmed by the stress he so boldly placed on his mistakes. One of his frequent remarks during his days of active surgical practice was: "I am not a lucky surgeon, therefore, I must do my work carefully in order to obtain a good result." In Dr. Mayo's office hangs the following slogan: "There is no fun like work." Someone once asked him what he did for recreation, and his answer was, "Work." His avocation in my estimation has consisted in observing what others did in order that he might further his own knowledge of medicine. He has often instructed me never to fail to visit a hospital or a medical school when the opportunity arose. Many of the valuable maneuvers he employed in operations were his own invention but many, as he frequently stated, were obtained from the house officers during a

visit to some small and often isolated hospital.

If one could impart to the medical student one's exact ideas after having practiced medicine for some years, doubtless some of them would prove of value, but somehow it is difficult to accept advice even when it is strongly suspected that it may be good. As I review my student days, I think I had the wrong viewpoint regarding almost everything that dealt with my teachings. It is perhaps difficult for *most* medical students to obtain the correct perspective with regard to training. I am of the impression that the average medical student spends much of his time thinking about grades and graduation. Perhaps the present system of grading employed in most universities is partially responsible for this attitude. I wonder if considerable of the anxiety about grades would not be dispensed with if it were possible to have only two grades, satisfactory and unsatisfactory. Since I know nothing about teaching, you might expect that I would make some recommendations on this subject.

During the time of undergraduate study, I think that most medical students attempt to think too far ahead, while others doubtless go to the other extreme and apparently think little or do not think at all. Osler, in addressing the medical students at Yale University, said that every man has worked out a philosophy for himself. I suppose that is true, but I am of the opinion that as students are confronted by various obstacles their philosophy changes at least once each semester. Naturally, what I say that the undergraduate student should do—call it advice if you like—is what I think I would do if I were again a medical student. I can

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fully sympathize with the student who not infrequently wonders just what certain parts of his medical curriculum have to do with people who are sick. If any who are here frequently have this thought, I can only say to you that knowledge of the fundamental subjects will be required and that in many instances such knowledge will be conspicuously absent.

The study of medicine is long and arduous. As Hippocrates said, "Life is short, the art is long." At the time of graduation the task will not have been completed. By that time, however, the new physician will be supposed to have acquired such knowledge and wisdom that he can make some practical application of it. It is well, I think, to remember that receipt of the diploma makes the recipient a doctor largely by title only. I make this statement not to be discouraging, but rather to encourage study. Internship is the young physician's first great opportunity to apply to clinical medicine the results of didactic teaching. I have heard students discuss, at the time of graduation, whether an internship was a complete, or only a partial, waste of time. To those students who have doubt about the value of an internship, the time is probably entirely wasted. The question of compulsory internship needs no comment, except to say that the doctor without postgraduate training wanders around more aimlessly than a ship without a rudder. The period of postgraduate training is the physician's first good chance to discover himself. By hard work, study, and observation, it affords a test of his potential wisdom. The tool of common sense is here imperative. Some students perhaps consider an internship a rest period in which they relax for a time before retiring to their home towns, where they will gladly enlighten older contemporaries on the new theories of disease and its treatment. Such students, however, usually develop into those young doctors who change location frequently, because it is difficult for them to find a community which appreciates their talent.

The intern year should be a year of work. Promptness, seriousness, and thorough study of cases are good investments. This is the period when one can learn to evaluate the patient's story of his illness, and can develop expertness in physical examination. These two factors form parts of the equa-

tion, and ability to correlate them will be the result. Careful observation of the methods of members of the staff, whether they prove to be right or wrong, all give to the young man an invaluable perspective.

Some graduates in medicine become general practitioners; others continue training in special fields. To determine just what branch of this vast subject one will become most interested in requires time. Things apparently of a trivial nature may influence one. Osler matriculated at Trinity College, in Ontario, because he read in one of the college bulletins that dancing and singing were taught to the senior class. It was here that he met Rev. W. A. Johnson, who, he said, was the sole influence that enabled him to become what he did become. Choice of a specialty should be determined entirely by one's interest in the subject.

Many students become disillusioned regarding specialization. I refer to the individual who selects a special field in medicine because it appears easy, a short cut to fame and possible fortune. Regardless of what branch of medicine is most intriguing, a general knowledge of the subject of medicine is necessary. A successful internist is one who has some knowledge of surgery. The surgeon who is successful must understand and know the fundamentals of diagnosis. The doctor who classifies himself as a surgeon because he cuts when and where the internist or physician instructs him to cut, is an operator only, and fortunately his type is fading into the background.

I am trying to emphasize the importance of a thorough training in medicine as a whole before any effort is expended in the direction of specialization. The eye specialist must know something of systemic disease. He must have a fundamental knowledge of neurology. He who attempts correction of vision when the cause of impaired eyesight is a tumor of the brain or nephritis is a mere fitter of glasses. The orthopedist needs more knowledge than a thorough understanding of anatomy of the skeletal system. To a degree he, too, must be an internist, a physician. He must know the effects of certain systemic diseases on the structures with which his special field is concerned. Every so-called specialty of medicine could be considered in this way, and it would be found that those who are outstanding in special fields are those who

have a good knowledge of general medicine.

When should the student or young physician, who intends to specialize, decide what his specialty is to be? The majority of those who think they know this at an early period of their education doubtless will be like Saul seeking his asses. "They suddenly will come on something more important." Therefore, there is no need to occupy the mind with this problem until more has been learned than can be acquired in the classroom. Sometime during the first or second year of internship is perhaps early enough to decide. All of any given class will not become specialists, perhaps only a small percentage will specialize; the remainder will become general practitioners.

During the last decade the general practitioner, the country doctor, and the specialist have all been criticized.

What is the trend of medicine with regard to the specialist and the general practitioner? The country doctor formerly was, for the majority of the community, the authority on many subjects. Along with the minister and the lawyer, he was called on to settle all controversies of the vicinity. The family physician is now consulted only for the professional service he can render, and that professional service is more limited than it was formerly. The family doctor, who twenty-five years ago extracted teeth, fitted glasses, cared for confinement cases, treated fractures, and so forth, is finding himself more limited because of the specialist. I do not misjudge the importance of the family doctor, for I realize that he can and does treat 80 per cent of all sickness. Furthermore, I think no one deserves more praise than the general practitioner who ministers to sick and suffering humanity. He gives freely of himself; his judgment in regard to the diagnosis and treatment of many maladies is founded on experience and in many instances is irreproachable. The medical graduate just out of school cannot compete with many of the widely experienced general practitioners in the average case. Years of experience have enabled the family doctor to practice medicine by ear better than the inexperienced man can practice by note. However, the recent graduate who is fundamentally well informed and makes practical application of his information, with accumulating experience, can place himself in a superior posi-

tion which will qualify him scientifically to diagnose and treat not only the usual garden varieties of diseases but the more unusual cases as well.

The trend of medicine seems to be toward specialization and group practice. It is not difficult to imagine that the patient who has an unusual condition receives better attention if all those who attend him are exceptionally well trained in one or two certain fields. Individualism in medicine can be compared to individualism in industry. Every well organized business today is operated not entirely by one individual but by groups of persons, each of whom is an expert in a particular department. It is true that the ailments of many patients are not difficult to diagnose and no more difficult to treat, but the unusual conditions which afflict roughly 20 per cent of people who seek medical advice can be managed best by a group of specialists. The trend of medicine toward specialization will answer, I think, a common question of the present time: Is the production of doctors today greater than the demand? According to the number being graduated from medical schools at present the supply will not meet the demand if specialization is taken seriously.

As I have said before, specialization is not infrequently criticized. Most of the criticism, however, is aroused by those individuals who have declared themselves to be specialists by desire rather than by extensive training. Can you imagine a physician who has done general practice for a number of years suddenly limiting himself to urology and thereby administering expertly to his clientele? He certainly cannot do so without special training and by that I do not mean a few weeks or months spent in observing someone who does things the way they should be done. The so-called specialists who are trained overnight are largely responsible for the criticisms against specialization. It is reasonable to assume, I think, that intensive training in a certain field of medicine, preceded by the acquirement of a thorough, general fundamental knowledge of the subject, qualifies one to do better work in a specialty than does the information gained through attempts to do everything. It requires time to become a true specialist; therefore, those who choose this type of practice will not be worthy of the designation until a considerable period

has elapsed following their graduation from medical school.

The public is becoming educated regarding professional requirements. Charlatans are being discovered earlier in their activities and are being punished. When those who patronize quacks decide to secure the services of doctors, more of the latter will be required. The various mediums for education of the public will have the desired effect, and "cure-alls" will fade into oblivion, where they have always belonged.

Regardless of how well trained a physician becomes, he will make mistakes of which he will not be proud, but if he is properly prepared to practice scientific medicine his "batting average" will be high and his results commendable.

As I near the close of my address I cannot refrain from emphasizing some ideals which I think are worth considering seriously. The physician should be interested in medicine to such an extent that commercialism does not enter his mind. If he works hard and takes advantage of his opportunities for training, remuneration for his efforts will be sufficient to furnish more than the necessities of life.

Even while a medical student it is well to acquire what some may term "useless knowledge." I refer to the reading of worthwhile literature. This must not be done at the expense of school work, but it can be done at the cost of a few hours of sleep, and it will broaden the view and increase the appreciation of all that is good. It is delightful, if possible, to be well informed on subjects other than medicine.

Time spent in ridiculing a competitor is

wasted. Osler said never to believe what a patient tells about another doctor even though there is reason to suspect that it is true.

No one dedicates his life more assiduously to humanity and its suffering than does the honest, painstaking, sympathetic physician who spends no small share of his life in arduous toil of preparation only to give freely of his knowledge and skill. I recite from Stephen Paget's "Confessio Medici," quoted by Cushing: "Every year, young men enter the medical profession who neither are born doctors, nor have any great love of science, nor are helped by name or influence. Without welcome, without money, without prospects, they fight their way into practice, and in practice they find it hard work, ill-thanked, ill-paid; there are times when they say, 'What call had I to be a doctor? I should have done better for myself and my wife and the children in some other calling.' But they stick to it, and that not only from necessity, but from pride, honor, conviction; and Heaven, sooner or later, lets them know what it thinks of them. The information comes quite as a surprise to them, being the first received from any source, that they were indeed *called* to be doctors; and they hesitate to give the name of vocation to work paid by the job, and shamefully underpaid at that. Calls, they imagine, should master men, beating down on them: surely a diploma, obtained by hard examination and hard cash, and signed and sealed by earthly examiners, cannot be a summons from Heaven. But it may be. For, if a doctor's life may not be a divine vocation, then no life is a vocation, and nothing is divine."

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*"Every man owes some of his time to the up-
 building of the profession to which he belongs."*

—THEODORE ROOSEVELT.

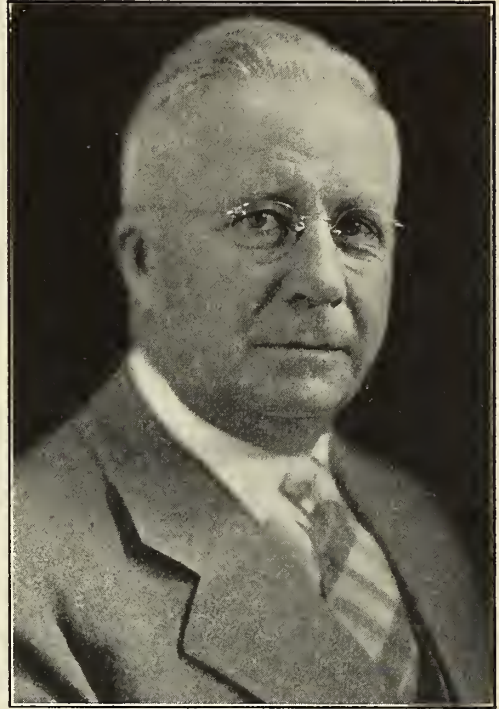
EDITORIAL

THE BASIC SCIENCE LAW

THE idea of a Basic Science Law which demands a uniform preliminary education for all who would look forward to practicing the healing art originated nearly a decade ago during Dr. John B. Jackson's presidency of the Michigan State Medical Society. The times, however, were apparently not ripe for such a law, so that it passed into oblivion until the idea was resuscitated last year. The drafting of the Basic Science Bill was largely the work of the legislative committee of the Michigan State Medical Society. A number of names might be mentioned in connection with the writing and phrasing of the model bill. The present legislative committee, however, under the vigorous chairmanship of Dr. L. G. Christian of Lansing, was very active in seeing it through to its desired fruition. The members of the present legislature,

however, are the final arbiters, and it is due to their insight and wisdom that the measure has actually become law.

When any measure comes before a legislative body, the members are solicitous that it may not affect adversely the interests of any group who may feel they have vested



HENRY E. PERRY, M. D., Newberry
 The President of the Michigan State Medical Society spent five months in the Capitol City during the Legislative session to help with the passage of the Basic Science Law.

rights. It is the desire to be fair on the part of the legislator that makes him try to see the matter from all angles and to amend it according to his best light. Dr. Christian and his committee, together with President Henry E. Perry, who transferred his residence to the Capital City during the session of the Legislature, pointed out during the past session the merits of the bill and endeavored to clear up any misapprehension. This entailed a lot of time, but the governor, senate and the house rose to the occasion in this broad public health measure.

We speak of it advisedly as a health measure in the interests of every inhabitant of the state. No practicing physician will benefit personally. This was not the purpose of the bill. With the advances in the sci-

ence of medicine and the efforts on the part of the profession to keep abreast of the times by availing themselves of the post-graduate opportunities offered, the cults have never been nor can they be a factor so far as competition is concerned. The bill, as we have repeatedly said, raises the standard of all aspirants to the healing arts so that the healer of choice, whether a member of the regular medical profession, or osteopath or chiropractor, will be a better educated man than he would be if not required to pass satisfactorily an examination in the basic sciences. The law is not retroactive and, therefore, cannot in any sense affect those already licensed to practice.

PROGRAM OF SYPHILIS CONTROL IN MICHIGAN

THE committee for the control of syphilis is a subcommittee of that on preventive medicine. This committee has devised a program for the control of syphilis which is suggested to public health boards as a guide to their control policies.

The essential features of the proposed control plan are: The medical profession of the state to coöperate in the national program, with the family physician an important factor; education and training of the physician for this work; coöperation by the local health department with trained personnel with an appropriate committee of the County Medical Society; consultation and special laboratory facilities; laboratory service for diagnosis and free drugs for treatment; compensation of physicians for treatment of the indigent and borderline indigent cases; and a uniform plan for all sections of the state.

To inaugurate such a program, funds are required. The original request for a federal appropriation of twenty-five million dollars has been cut to four million so that the remaining hope is for state and county appropriations. The Michigan legislature has appropriated the sum of twenty-five thousand dollars for the purchase of anti-syphilitic drugs, which, while inadequate, is a move in the right direction.

The work of the medical profession consists in finding sources of infection and contacts and the administration of adequate treatment. For this work, each phy-

sician should especially qualify himself by means of refresher courses or by close study of his medical journals which seek to supply this information from time to time.

The public are becoming acquainted with syphilis and its ravages. The word has come out of hiding and has been accorded a place in the public press. In other words, the public is becoming health-minded.

The members of the medical profession should feel that it is their opportunity to carry on this work. They should not capitulate entirely to health boards, which means a further inroad of state medicine. Dr. Thomas Parran, the surgeon-general, has declared himself interested in the results only. If favorable results can be obtained by the coöperation of the private practitioner, so much the better.

THE JOINT COMMITTEE

THIS term, as is well known to the profession of the state, comprises a group made up of representatives from various institutions which are concerned with health; among them the Michigan State Medical Society, The University of Michigan Medical School, the Wayne University Medical School, The Michigan State Nurses Association, The Michigan State Dental Society, the Michigan Tuberculosis Association and a number of others. The object of this organization is to disseminate medical knowledge or health education among the laity. Its function is to instruct, not to propagandize. The work of the association has been accomplished by means of health columns in the various daily and semi-weekly newspapers throughout the state, supplemented by addresses by physicians before school audiences and parent-teacher associations as well as before other lay groups.

The Public, as a result of the work of this organization, have become health conscious. The various campaigns for the elimination of infectious diseases, such as tuberculosis and syphilis, have also furthered the idea of public health.

At a recent meeting of the Joint Committee, Dr. Burton R. Corbus of Grand Rapids was elected to act as chairman for this year. Dr. Corbus has been very active in the interests of the Michigan State Medical Society for many years. His experience

fits him admirably for the position. We look forward to a year of unprecedented activity in this matter of public health education, which, if it is to be effective, must be directed by the medical profession of the state.

RABIES

THERE have been a number of cases of rabies reported by the daily press in Detroit and we presume also in other places throughout the state. According to the *Journal of the American Medical Association*, the situation is even worse in Chicago than in Detroit. The danger of rabies appears to be very real where a large number of unowned or stray dogs are permitted to roam the city streets.

Commenting on the work of the Rockefeller Foundation, which covers a worldwide field, the *Journal of the American Medical Association* goes on to say.

"The extent to which informed sources recognize the great danger of rabies is further illustrated by the fact that the Rockefeller Foundation began a program of laboratory and field work on rabies in 1936. This disease, according to the foundation report, has become increasingly menacing, particularly in some of the southern states. With this recognition that some regions are more threatened than others, it must also be emphasized that no areas where possible carriers of rabies are present can be considered exempt. The Rockefeller report also states that there has been little research on this disease since Pasteur's time. A quicker and more positive test for rabies in animals and a less cumbersome method of vaccination are badly needed.

"All these facts point to the conclusion that immediate and coordinated action is necessary. Rabies is a disease in which individual efforts are relatively helpless unless aided by the full machinery of social organization. The press, public health officials, the police and physicians—in both their individual and their official capacities—should take steps to combat this threatening situation at once if a considerable number of unnecessary deaths is to be avoided. In the face of the now existing information as to the frequency and rapid spread of rabies among animals, it seems criminal to postpone action until the disease is identified in human beings. Because rabies is primarily a disease of dogs, it seems likely that this campaign will have the whole-hearted support of all the animal humane societies."

No one can take exception to the advice suggested in the last paragraph. From the letters in the newspapers, one is led to conclude that the population is divided into two classes, dog lovers and dog haters. A great deal of emotion is displayed by the public letter writers of both classes. Being a dog lover, we would suggest that the dog

owner comply to the letter with advices from health departments. To protect the dog, he should be kept off the street where no other animal can harm him.

We wonder if rats are not a source of spread of the disease. Most cities are infested with rats and there is no concerted effort towards their extermination. We would advise an anti-rat campaign as a helpful measure toward prevention.

Children and grown-ups alike should refrain from petting any dogs not well known. Dogs resent the familiarity of strangers and are apt to snap at them, in which case the humans are entirely at fault.

Without indulging in any homily on the dog, one should protect his pets by at least keeping them off the streets where they will neither menace others nor be menaced by others not so protected.

BASIC SCIENCE

The Basic Science Bill has become a law in Kansas.

The bill, as originally presented, contained provisions that would have required all representatives of the healing arts affected by it to prove themselves qualified in five basic subjects which are taught in all of their schools.

The public was then to have been served by representatives of not one or two, but three branches of the healing arts, all better qualified to render health service.

As amended, however, the law exempts osteopaths, chiropractors, and all other practitioners who are now regulated by their state board examiners.

The legislative battle failed to develop a means by which the public can measure training qualifications of some schools; yet the battle was not in vain. Several other branches of the healing arts do not have state board examiners, therefore their representatives who meet the requirements of this law may gracefully present themselves to the public with their qualifications.—*The Journal of the Kansas Medical Society*, May, 1937.

THIS is what has happened to the basic science bill in the Kansas legislature. The apparent misunderstanding on the part of the legislators who emasculated the bill is unfortunate. There is an old Latin adage, *Salus populi suprema lex*. The purpose of such proposed legislation is the safety of the people. When interpreted as the interest of any class, group or cult, the result is what we have described here, by the editor of the *Journal of the Kansas Medical Society*.

As we have written repeatedly, there is only one basis for all healers (and this in-

cludes the medical profession) and that is included in the basic subjects named in the Kansas Bill as well as that recently made into law by the Michigan legislature. There is no more of a place for cultism in the healing professions than there is in engineering or physics or chemistry in their broad scientific application. It is hoped that in the interests of the people of Kansas as well as any other state, the legislators will realize this fact.

VACATIONS

THE season has arrived when the uppermost thought in the mind of many is how and where to spend the vacation. Particularly is this true with salaried persons who have from two weeks to two months at their disposal for gaining a second wind before resuming their occupations. Physicians, in the aggregate, take time off from their work less frequently than any other professional group. For a few, it is an afternoon a week at golf. Fewer still are disciples of Izaak Walton. Everyone, if possible, should have a change of scene at least once a year; oftener, if possible.

Many, however, seldom or never take time off from their work. We have in mind, more particularly, the professional man, the doctor, dentist or lawyer, with whom so-called overhead expense never goes on vacation. They cannot take time off, or at least feel that it cannot be done. There is an old saying, "If you can't get what you want, want what you have." Suppose the majority of us, then, want what we have. Medicine has many compensating qualities besides the more or less meager, sometimes uncertain, monetary returns that too often reward one's services. It is interesting and varied as an art and science. It presents problems for solution that are themselves stimulating and thus eliminate monotony. The same is true of the work of editing a medical journal. The solution of problems keeps the mind from becoming jaded. It is the monotonous routine of an occupation that makes periodic change necessary. Where persons are satisfactorily adjusted, work is less enervating. Again, to quote an old stoic proverb, "Men are tormented by the opinion they have of things, rather than by the things

themselves." In other words, it is not work that hurts us so much as the way we react to it. A harmonious relation between man and his task will go a long way in the matter of a continual renewal of strength and outlook, so that weeks or months spent *in absentia* are not really necessary.

Then there is another aspect. One should never feel hurried in his work. Hurry causes inferior work and inferior work never satisfies. Geared to the tempo of a machine, the strongest nerves must sooner or later give out. With interesting work, satisfactory adjustment and absence of hurry and worry, those who cannot take a periodic vacation may feel themselves not so badly off after all.

Diagnostic Aspects of Roentgenologically Negative Gastric Disorders

George B. Eusterman, Rochester, Minn. (*Journal A. M. A.*, Oct. 31, 1936), states that in the process of elimination, a negative report is of the greatest diagnostic value and would for practical purposes exclude ulcer of the stomach and duodenum, gastric carcinoma, pyloric and duodenal obstruction and duodenal dilatation from whatever cause. A negative report also would exclude roentgenologically positive forms of gastritis and the majority of the rare forms of gastric and duodenal lesions such as benign granulomatous and lymphomatous tumors, diverticula, the majority of diaphragmatic hernias and the occasional deformities caused by extensive adhesions. In their aggregate such intrinsic lesions are responsible for about a fifth of the cases of chronic gastric disturbances. In private general practice the percentage may not exceed 10. The conditions just enumerated may be regarded as roentgenologically positive disorders. In considering roentgenologically negative gastric disorders the classification proposed by Berger is simple yet comprehensive. It is substantially as follows: (1) unrecognized roentgenologically positive gastric disorders, (2) roentgenologically negative disorders of the stomach itself, (3) actual or apparent gastric disturbances resulting from disease of abdominal viscera other than the stomach, and (4) actual or apparent gastric disturbances resulting from disease remote from the abdominal organs. Gastric disturbances reflexly engendered by disease of abdominal viscera other than the stomach itself or its continuations in the author's opinion exceed in importance the gastric neuroses, because of their nature and extent and the comparative frequency of their occurrence. They constitute from a third to two fifths of all cases. The neuroses constitute about a fourth of the total. In from 15 to 20 per cent of cases, gastric disturbances are attributable to disease of organs remote from the stomach, but only on infrequent occasions are such gastric disturbances the sole expression of an extragastric disorder. Complete and systematic anamnesis and physical examination, and a few simple well chosen laboratory studies, will usually disclose the true nature of the underlying cause no matter how irrelevant the subjective complaint may appear to be.

THE OCCUPATIONAL DISEASE LAW

STATE OF MICHIGAN

59TH LEGISLATURE

REGULAR SESSION OF 1937

Senate Bill No. 106

Introduced by Senators Hittle and Burke

Senate Enrolled Act No. 28

(Ordered to be known as the "Hittle-Burke-Rowell-Smith-Martin Act.")

AN ACT to amend the title of act number ten of the public acts of the first extra session of nineteen hundred twelve, entitled "An act to promote the welfare of the people of this state, relating to the liability of employers for injuries or death sustained by their employes, providing compensation for the accidental injury to or death of employes and methods for the payment of the same, establishing an industrial accident board, defining its powers, providing for a review of its awards, making an appropriation to carry out the provisions of this act, and restricting the right to compensation or damages in such cases to such as are provided by this act," as amended, being sections eight thousand four hundred seven to eight thousand four hundred eighty-five, inclusive, of the compiled laws of nineteen hundred twenty-nine, and to add thereto a new part to stand as part seven, and to consist of sections one to thirteen inclusive.

The People of the State of Michigan enact:

Section 1. The title of act number ten of the public acts of the first extra session of nineteen hundred twelve, entitled "An act to promote the welfare of the people of this state, relating to the liability of employers for injuries or death sustained by their employes, providing compensation for the accidental injury to or death of employes and methods for the payment of the same, establishing an industrial accident board, defining its powers, providing for a review of its awards, making an appropriation to carry out the provisions of this act, and restricting the right to compensation or damages in such cases to such as are provided by this act," as amended, being sections eight thousand four hundred seven to eight thousand four hundred eighty-five, inclusive, of the compiled laws of nineteen hundred twenty-nine, is hereby amended, and a new part is hereby added to said act to stand as part seven, and to consist of sections one to thirteen inclusive, said amended title and added part and sections to read as follows:

TITLE

An act to promote the welfare of the people of this state, relating to the liability of employers for injuries or death sustained by their employes, providing compensation for the disability or death resulting from occupational injuries or disease or accidental injury to or death of employes and methods for the payment, and apportionment of the same, establishing an industrial accident board, defining its powers, providing for a review of its awards, making an appropriation to carry out the provisions of this act, and restricting the right to compensation or damages in such cases to such as are provided by this act.

PART VII

Sec. 1. Definition. Whenever used in this act:

(a) The word "disability" means the state of being disabled from earning full wages at the work at which the employe was last employed;

(b) The word "disablement" means the event of becoming so disabled as defined in subparagraph (a);

(c) The term "occupational disease" means a disease which is due to causes and conditions which are characteristic of and peculiar to a particular trade, occupation, process or employment.

Sec. 2. The disablement of an employe resulting from an occupational disease or condition described in the following schedule shall be treated as the happening of a personal injury by accident within the meaning of this act and the procedure and practice provided in this act shall apply to all proceedings under this part, except where specifically otherwise provided herein:

Disabilities arising from

1. Anthrax

2. Lead poisoning or its sequelæ

3. Zinc poisoning or its sequelæ

4. Mercury poisoning or its sequelæ

Caused by

Handling of wool, hair, bristles, hides or skins

Any process involving the use of or direct contact with lead or its preparations or compounds.

Any process involving the use of or direct contact with zinc or its preparations or compounds or alloys.

Any process involving the use of or direct contact with mercury or its preparations or compounds.

5. Phosphorus poisoning or its sequelæ Any process involving the use of or direct contact with phosphorus or its preparations or compounds.
6. Arsenic poisoning or its sequelæ Any process involving the use of or direct contact with arsenic or its preparations or compounds.
7. Poisoning by wood alcohol Any process involving the use of wood alcohol or any preparation containing wood alcohol.
8. Poisoning by benzol or nitro-, hydro-, hydroxy-, and amido-derivatives of benzene (dinitro-benzol, anilin, and others), or its sequelæ Any process involving the use of or direct contact with benzol or nitro-, hydro-, hydroxy-, or amido-derivatives of benzene or its preparations or compounds.
9. Poisoning by carbon bisulphide or its sequelæ, or any sulphide Any process involving the use of or direct contact with carbon bisulphide or its preparations or compounds, or any sulphide.
10. Poisoning by nitrous fumes or its sequelæ Any process in which nitrous fumes are evolved.
11. Poisoning by nickel carbonyl or its sequelæ Any process in which nickel carbonyl is evolved.
12. Dope poisoning (poisoning by tetrachlor-methane or any substance used as or in conjunction with a solvent for acetate of cellulose or nitro cellulose), or its sequelæ Any process involving the use of or direct contact with any substance used as or in conjunction with a solvent for acetate of cellulose or nitro cellulose.
13. Poisoning by formaldehyde and its preparations Any process involving the use of or direct contact with formaldehyde and its preparations.
14. Chrome ulceration or its sequelæ or chrome poisoning Any process involving the use of or direct contact with chromic acid or bichromate of ammonium, potassium, or sodium or their preparations.
15. Epitheliomatous cancer or ulceration of the skin or of the corneal surface of the eye, due to tar, pitch, bitumen, mineral oil or paraffin, or any compound, product or residue of any of these substances. Handling or use of tar, pitch, bitumen, mineral oil, or paraffin or any compound, product or residue of any of these substances.
16. Glanders Care or handling of any equine animal or the carcass of any such animal.
17. Compressed air illness or its sequelæ Any process carried on in compressed air.
18. Miners' diseases, including only cellulitis, bursitis, ankylostomiasis, tenosynovitis and nystagmus Any process involving mining.
19. Cataract in glassworkers Processes in the manufacture of glass involving exposure to the glare of molten glass.
20. Radium poisoning or disability due to radio-active properties of substances or to Roentgen rays (X-rays) Any process involving the use of or direct contact with radium or radio-active substance or the use of or direct exposure to Roentgen rays (X-rays).
21. Methyl chloride poisoning Any process involving the use of or direct contact with methyl chloride or its preparations or compounds.
22. Carbon monoxide poisoning Any process involving direct exposure to carbon monoxide in buildings, sheds or enclosed places.
23. Poisoning by sulphuric, hydrochloric or hydrofluoric acid Any process involving the use of or direct contact with sulphuric, hydrochloric or hydrofluoric acids or their fumes.
24. Respiratory, gastro-intestinal or physiological nerve and eye disorders due to contact with petroleum products and their fumes Any process involving the use of or direct contact with petroleum or petroleum products and their fumes.
25. Disability arising from blisters or abrasions Any process involving continuous friction, rubbing or vibration causing blisters or abrasions.

OCCUPATIONAL DISEASE LAW

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| 26. Disability arising from bursitis or synovitis | Any process involving continuous rubbing, pressure or vibrations of the parts affected. |
| 27. Dermatitis (venenata) | Any process involving the use of or direct contact with acids, alkalies, acids or oil, or with brick, cement, lime, concrete, or mortar capable of causing dermatitis (venenata). |
| 28. Hernia | Clearly recent in origin and resulting from a strain, arising out of and in the course of employment and promptly reported to the employer. |
| 29. Stone worker's or grinder's phthisis | Quarrying, cutting, crushing, grinding or polishing of stone, or grinding or polishing of metal. |
| 30. Silicosis | Mining. |
| 31. Pneumoconiosis | Quarrying, cutting, crushing, grinding or polishing of metal. |

Sec. 3. If an employe is disabled or dies and his disability or death is caused by one of the diseases mentioned in the schedule contained in section two of this part and the disease is due to the nature of the employment in which such employe was engaged and was contracted therein, he or his dependents shall be entitled to compensation for his death or for his disablement, and he shall be entitled to be furnished with medical and hospital services, all as provided in part two of this act, except as hereinafter stated in this part: *Provided, however,* That if it shall be determined that such employe is able to earn wages at another occupation which shall be neither unhealthful nor injurious and such wages do not equal his full wages prior to the date of his disablement, the compensation payable shall be a percentage of full compensation proportionate to the reduction in his earning capacity.

Sec. 4. Compensation shall not be payable for partial disability due to silicosis or other dust disease. In the event of temporary or permanent total disability or death from silicosis or other dust disease, notwithstanding any other provisions of this act, compensation shall be payable under this part to employes in the employments enumerated in section three of this part, or to their dependents in the following manner and amounts: If disablement or death occurs during the first calendar month in which this act becomes effective not exceeding the sum of five hundred dollars; if disablement or death occurs during the second calendar month after which this act becomes effective not exceeding the sum of five hundred and fifty dollars; thereafter the total compensation and benefits payable for disability and death shall increase at the rate of fifty dollars each calendar month. The aggregate amount payable shall be determined by the total amount payable in the month in which disablement or death occurs. In no event shall such compensation exceed an aggregate total of three thousand dollars.

Sec. 5. Neither the employe nor his dependents shall be entitled to compensation for disability or death resulting from such occupational disease, unless such occupational disease is due to the nature of his employment and was contracted therein, or in a continuous employment similar to the one in which he was engaged at the time of his disablement, within twelve months previous to the date of disablement, whether under one or more employers. The time limit for contraction of the occupational disease prescribed by this section shall not bar compensation in the case of an employe who contracted such occupational disease in the same employment with the same employer by whom he was employed at the time of his disablement and who had continued in the same employment with the same employer from the time of contracting such occupational disease up to the time of his disablement thereby.

Sec. 6. In case the employe is alleged to be suffering from an occupational disease and there shall be a dispute with respect thereto, the said board, or any member thereof, shall appoint a commission of three qualified impartial physicians to examine the injured employe and to report. The report, when signed by at least two of the members of said commission, shall be final and conclusive as to the condition of said employe with respect to the alleged disease or diseases. Members of the commission shall receive such compensation for their services as shall be fixed by the board, to be paid from the appropriation to the department of labor and industry.

Sec. 7. For the purposes of this part the date of disablement shall be such date as the board may determine on the hearing of the claim.

Sec. 8. No compensation shall be payable for an occupational disease if the employe, at the time of entering into the employment of the employer by whom the compensation would otherwise be payable, or thereafter, wilfully and falsely represents in writing that he has not previously suffered from the disease which is the cause of the disability or death. Where an occupational disease is aggravated by any other disease or infirmity, not itself compensable, or where disability or death from any other cause, not itself compensable, is aggravated, prolonged, accelerated, or in any wise contributed to by an occupational disease, the compensation payable shall be such proportion only of the compensation that would be payable if the occupational disease were the sole cause of the disability or death as such occupational

disease, as a causative factor, bearing to all the causes of such disability or death, such reduction in compensation to be effected by reducing the number of weekly payments or the amounts of such payments, as under the circumstances of the particular case may be for the best interests of the claimant or claimants.

Sec. 9. The total compensation due shall be recoverable from the employer who last employed the employee in the employment to the nature of which the disease was due and in which it was contracted. If, however, such disease was contracted while such employee was in the employment of a prior employer, the employer who is made liable for the total compensation as provided by this section may appeal to said board for an apportionment of such compensation among the several employers who since the contraction of such disease shall have employed such employee in the employment to the nature of which the disease was due. Such apportionment shall be proportioned to the time such employee was employed in the service of such employers, and shall be determined only after a hearing, notice of the time and place of which shall have been given to every employer alleged to be liable for any portion of such compensation. If the board finds that any portion of such compensation is payable by an employer prior to the employer who is made liable for the total compensation as provided by this section, he shall make an award accordingly in favor of the last employer, and such award may be enforced in the same manner as an award for compensation.

Sec. 10. The employer to whom notice of death or disability is to be given, or against whom claim is to be made by the employee, shall be the employer who last employed the employee during the said twenty-four months in the employment to the nature of which the disease was due and such notice and claim shall be deemed seasonable as against prior employers. The requirements as to notice as to occupational disease and death resulting therefrom and the requirements as to the bringing of proceedings for compensation for disability or death resulting from such occupational disease shall be the same as required in section fifteen of part two of this act, except that the notice shall be given to the employer within one hundred twenty days after the disablement.

Sec. 11. The employee, or his dependents, if so requested, shall furnish the last employer or the board with such information as to the names and addresses of all his other employers during the said twenty-four months, as he or they may possess; and if such information is not furnished, or is not sufficient to enable such last employer to take proceedings against a prior employer under section ten of this part, unless it be established that the occupational disease actually was contracted while the employee was in his employment such last employer shall not be liable to pay compensation, or, if such information is not furnished or is not sufficient to enable such last employer to take proceedings against other employers under section ten of this part, such last employer shall be liable only for such part of the total compensation as under the particular circumstances the director may deem just; but a false statement in the information furnished as aforesaid shall not impair the employee's right unless the last employer is prejudiced thereby.

Sec. 12. Nothing in this act shall affect the rights of an employee, or his dependents, to recover compensation in respect to a disease to which this act does not apply, if the disease, apart from this act, is one for which compensation is payable under the other provisions of this act.

Sec. 13. This act shall not apply to cases of occupational disease in which the last injurious exposure to the hazards of such disease occurred prior to the effective date of this act.

This act shall not apply to any employer or employee in agricultural industry or in the nursery or orchard business, or to any labor incidental to farming, including repairs on buildings and other property in connection therewith.

.....
Secretary of the Senate.

.....
Clerk of the House of Representatives.

Approved.....

.....
Governor.

THE LEGISLATIVE COMMITTEE



L. H. BARTEMEIER, M.D.
Detroit



J. B. BRADLEY, M.D.
Eaton Rapids



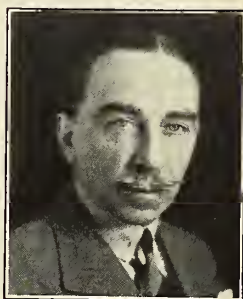
HENRY COOK, M.D.
Flint



J. W. HAWKINS, M.D.
Detroit



L. G. CHRISTIAN, M.D., Chairman
Lansing



WM. A. HYLAND, M.D.
Grand Rapids



P. A. RILEY, M.D.
Jackson



WM. E. E. TYSON, M.D.
Detroit



P. R. URMSTON, M.D.
Bay City

"At great personal sacrifice, these physicians gave generously of their time and talents during five long months to engineer through the 1937 Michigan Legislature the most important preventive medical measure presented to the Legislature during the past thirty-eight years—the Basic Science Law.

"Each and every physician—and all the people—owe a debt of everlasting gratitude to the chairman and members of the Legislative Committee of the Michigan State Medical Society."



THE INVESTMENT PROGRAM

By HENRY C. BLACK and
ALLISON E. SKAGGS

WHILE previous discussions in these columns have dealt largely with methods for increasing income, it is no less important to consider carefully the proper handling of these funds after they have been obtained. Investments should be approached with the thought in mind that money is a tool with which may be fashioned whatever of ownership or security the individual doctor most desires, and if we outline some of the more common forms possibly a few of the pitfalls may be exposed and the way shown for getting the most personal satisfaction from them.

Before investing in ordinary stocks and bonds there are several requirements that should be met:

1. An adequate life insurance program.
2. All debts paid.
3. A substantial bank account.
4. A reserve in savings or Government bonds.

Life Insurance

Regardless of financial trends, it is generally conceded that well-programmed life insurance is always a safe and conservative means of establishing an estate early in life. Every doctor rightly wants to assure his family of an adequate living in the event of his death, and the reserve thus established can provide an income for him in his less productive years if necessary. Until at least a minimum requirement of life insurance is purchased, it is very doubtful if any other form of investment need be considered at all. Life insurance should be bought, not in terms of dollars and cents, but rather in terms of what requirements it needs to meet.

Pay Your Debts First

Absurd as it may sound, large numbers of men are playing the stock market or making monthly payments to investment firms when they owe large sums on their own business equipment or on their homes.

Such jeopardizing of absolute personal necessities for the sake of a possible profit sometime in the indefinite future cannot be too strongly condemned, and it is usually a result of illogical planning and haphazard buying.

Substantial Bank Account

The financial difficulties encountered by any business are often caused by a lack of ready cash to carry on through an emergency and it is with this definitely in mind that the first investment, after providing some guarantee of income for the family, should be an investment in peace of mind—the building up of a substantial bank account. That would mean a bank account large enough to allow payment in full of all bills on the tenth of the month with a sufficient balance left over for the following month's requirements even if there were no further income.

Cash Reserves

Just as cash in the bank is important for handling current living and operating expenses without financial worries, a reserve fund in Government bonds or in a savings account is valuable in the event of an emergency, and the comparatively low interest rate is more than offset by the knowledge that the money is readily available if and when needed. Many times an excellent idea cannot be carried out or a family emergency becomes difficult because cash cannot be obtained when needed.

Use a Specialist

Most of these suggestions are written with an average medical income in mind, for the man who has large funds to invest already knows and uses similar ideas. When requirements previously mentioned are satisfied and surplus funds of \$1,000.00 or more are available for investment, intelligent doctors should use the same good advice they give their patients. They should take their problem to an experienced investment counsel who is deserving of their confidence, and follow his advice. Many such men have studied the market trends for

(Continued on Page 507)

President's Page

PROGRESS AND PUBLIC SERVICE

WITH the adjournment of the Michigan Legislature on June 25, the Legislative Committee of the Michigan State Medical Society had full reason to breathe a sigh of relief and satisfaction. Relief, because an end had been reached to six months of hard, nerve-racking work; satisfaction, because its program to protect health laws and promote medical legislation for the benefit of the people had been highly successful.

Of first interest to the medical profession of Michigan was the enactment into law of the Basic Science Bill, and the securing of an appropriation for the new Basic Science Board; of high importance to all physicians in the state was the passage of sound Welfare and Relief legislation; then the Occupational Disease Law, the Ante-Nuptial Examination Act, and other beneficial measures claimed the attention of your Legislative Committee; in addition, further and constant effort was required to keep destructive proposals from becoming statutes.

For effective work and telling leadership, sincere and generous thanks are due to Dr. L. G. Christian of Lansing, Chairman of the State Society's Legislative Committee, and to the members of his Committee, Dr. L. H. Bartemeier of Detroit, Dr. J. B. Bradley of Eaton Rapids, Dr. Henry Cook of Flint, Dr. J. W. Hawkins of Detroit, Dr. Wm. A. Hyland of Grand Rapids, Dr. Philip A. Riley of Jackson, Dr. W. E. E. Tyson of Detroit and Dr. Paul R. Urmston of Bay City.

Praise and gratitude are forthcoming to family physicians of legislators, key-men in every county of the state, and chairmen and members of county society legislative and policy committees, who labored valiantly in behalf of House Bill No. 261.

With a deep sense of obligation, tangible help from Dean R. T. Lakey of Detroit is acknowledged, and from numerous presidents and deans of our teaching institutions who boldly expressed themselves as favoring a Basic Science Law.

Through close coöperation and unity, real progress has been made. Let us persevere in our course and continue our gains, standing as one in efforts to protect the people's health and improve medical practice in this state.

I am deeply grateful for the unanimous support given the State Society in its major effort during my tenure of office. I entreat you to keep up your enthusiasm, your unity, and your coöperation, so that my successors, year after year, may report a continuation of progress and greater public service.



President of the Michigan
State Medical Society

DEPARTMENT OF SOCIETY ACTIVITY

L. FERNALD FOSTER, M.D., Secretary

Council Chairman's

- - - Communication

THE VALUE OF "STATE NIGHTS" IN ORGANIZED MEDICINE

TOO much cannot be said for organized medicine. Its protective value to you is most important. When economics are safely cared for then you have the time and money to attend postgraduate courses and keep up your scientific work. Don't you think this a good combination?

The officers of the Michigan State Medical Society are willing to sacrifice their time to meet you face to face and explain to you just what is organized medicine and what is keeping your State Society very busy. We invite you to invite us to visit your county medical society.

The great game of Baseball of the major and minor leagues is highly organized. The players make errors occasionally—but only repeated errors lower their value in the organization. Errors in organized medicine have occurred. The intent was in the right direction but the player should have had an assist to properly conduct the play.

This is why organized medicine has established *regular channels* through which every matter affecting the profession must pass for efficiency and results.

The officers and committees value your assistance. However, before taking action on any matter of general medical interest, look in THE JOURNAL for the right committee through which your aid and advice shall flow to insure a unified front with which best results are achieved. In emergency, throw directly home to 2020 Olds Tower, Lansing.

Remember, you are the Michigan State Medical Society now and always.

P. R. URMSTON, M.D.,

Chairman of The Council.

NEW STATE WELFARE LAW

THE Michigan State Legislature, in passing Senate Bill No. 111, created a new State Welfare Department.

Of particular interest to the allied medical professions are Sections 9 and 19:

Section 9. The commission is hereby authorized and empowered to create or abolish bureaus or divisions within the department for the economic and efficient administration of the work of the department, and to allocate and re-allocate their several functions and duties. *The commission may create within the department a bureau or division of medical care; and if such bureau or division of medical care is created, the director, having first obtained the approval of the commission, shall appoint a properly qualified licensed doctor of medicine as the head thereof, which doctor shall at all times be subject to the control of the commission and director.*

Section 19 reads as follows:

The commission shall provide for the distribution of such moneys as shall be appropriated by the legislature for general public relief hitherto known as unemployment relief and poor relief, *including medical care other than hospitalization, to the several county departments of public welfare, taking into consideration the need for relief and the financial resources of the respective counties on the basis of showings made to the commission, which distribution to each county, city or district department of public welfare shall be in an amount not less than that expended by such department for general public relief, exclusive of state and federal funds, during the previous month. Such moneys may be used to defray administrative expenses. Medical care as used in this section shall be deemed to include home and office attendance by physicians, dental service, bed-side nursing service in the home, pharmaceutical service, and the burial of the bodies of deceased indigent persons. Insofar as practicable the physician-patient relationship shall be maintained; and normal relationships between the recipients of dental, nursing, pharmaceutical, and burial service and the persons furnishing these services shall be maintained:* provided, That nothing in this section shall be construed as affecting any city physician's office established under any city charter.

The Michigan allied health group, composed of the state associations of physicians, dentists, nurses, pharmacists, and funeral directors, sponsored the above amendment (as indicated in *italics*). In securing these important provisions in such a comprehensive welfare law, the allied health group obtained great assistance from Senator Earnest C. Brooks of Holland, Chairman of the Senate Welfare and Relief Committee, and from Representative Chester B. Fitzgerald

of Detroit, Chairman of the Social Aid and Welfare Committee in the House of Representatives. To these chairmen, and to Representative Arthur Royce of Mecosta who defended the medical set-up on the floor of the House, the thanks of the allied medical profession are due and gratefully extended.

The benefits which people on welfare will receive from this far-sighted relief program will redound to the everlasting credit of all legislators who voted favorably for the State Welfare Act of 1937.

MINUTES OF MEETING OF THE EXECUTIVE COMMITTEE OF THE COUNCIL

June 16, 1937

1. *Roll Call*.—The meeting was called to order in the Statler Hotel, Detroit, at 2:15 P.M. by the Chairman, P. R. Urmston. Those present included Dr. P. R. Urmston, Bay City; Dr. A. S. Brunk, Detroit; Dr. F. E. Reeder, Flint; Dr. T. F. Heavenrich, Port Huron; Dr. H. R. Carstens, Detroit; and Dr. I. W. Greene, Owosso. Also present were Dr. Henry Cook, Flint; Dr. L. G. Christian, Legislative Committee Chairman, Lansing; Dr. J. H. Dempster, Detroit; Dr. Angus McLean, Detroit; Dr. Wm. R. Torgerson, Grand Rapids; Dr. M. P. Miller, Trenton; Dr. Dean W. Hart, St. Johns. Also Mr. H. A. Barbour and Mr. C. C. Purdy, attorneys; and Mr. Ralph Gault, Flint, President of Hurley Hospital Board; Dr. T. K. Gruber, Eloise; Dr. J. M. Robb, Detroit; and Executive Secretary Wm. J. Burns.

2. *Minutes*.—The minutes of the meeting of May 13 were read, corrected in Items 6 and 7, and approved as corrected.

3. *Medico-Legal Committee*.—Chairman Angus McLean, Mr. Barbour and Mr. Purdy discussed various problems in connection with medico-legal defense. After full discussion the members of the Medico-Legal Committee and Attorneys Barbour and Purdy were thanked for their attendance and advice.

4. *Admission Policy at University of Michigan Hospital*.—Dr. M. P. Miller of Trenton presented a specific case, which was thoroughly discussed by all present. Dr. Miller will see the Chairman of the Wayne County Filter Committee. The Executive Committee will invite the attention of the Wayne County Medical Society to this case.

5. *Legislative Committee Activity*.—Chairman L. G. Christian reported on the work of the MSMS Legislative Committee, and reviewed House Bill 235, House Bill 202, House Bill 400, Senate Bill 274. Dr. Christian stressed the need for future activity and meetings with other groups interested in health legislation, and the creation of a Michigan Health League or Council. The report of the Legislative Committee was accepted with thanks and ordered placed on file.

6. *Financial Report*.—The financial report for the month of May, and bills payable for the month were presented. Motion of Drs. Brunk-Carstens that the bills be paid and the reports be accepted and placed on file. Carried unanimously.

7. *Annual Meeting*.—The Executive Secretary reported on the progress of the Annual Meeting, outlining the program to date for the seven General Assemblies, and also on the booth sales in the Technical Exhibit.

8. *The Journal*.—A necessary increase in the cost of publishing THE JOURNAL was presented by the Publications Committee, which recommended that same be allowed, beginning with the June, 1937, issue. Motion of Drs. Carstens-Greene that the Committee Report be accepted. Carried unanimously.

9. *Student Health Service*.—Dr. T. K. Gruber spoke of this matter, and reported on the resolution presented to the American Medical Association House of Delegates. The A.M.A. will make a protest to the North Central Association of Secondary Schools and Colleges regarding their present policy.

10. *Post-Graduate Program*.—The following invited guests were present to discuss increased post-graduate activity: Drs. A. P. Biddle, C. C. Slemons, H. H. Cummings, R. B. Allen, L. J. Hirschman, and H. H. Riecker.

Dr. Cummings presented the report of the Chairman of the Advisory Committee on Post-graduate Education, Dr. J. D. Bruce, on (a) the activities of the Joint Committee on Health Education; (b) the Post-graduate Conference in Atlantic City of June 9; and (c) financial support for the Michigan Post-graduate program. Dr. Bruce recommended the creation of an endowment fund for post-graduate education of \$500,000, to be secured during the next five years, and stated that he personally would be responsible for the collection of \$125,000. Dr. Riecker explained the differences between the activities of the Joint Committee on Health Education, and those of the Advisory Committee on Post-graduate Education, at the request of several present. General discussion ensued. The Executive Committee is very interested in the work of the Joint Committee, and asked to have next year's program presented to it in detail.

Dr. Cummings reviewed the progress of the Post-graduate program, and stated that work this Fall would be earlier and would include talks on syphilis. He stated Dr. Bruce suggested that the Michigan State Medical Society apportion \$2,000 for post-graduate work next year. In the discussion, Dean Allen of Wayne University Medical School congratulated Michigan on its post-graduate Medical activity; Commissioner of Health Slemons spoke of the continuation of post-graduate refresher courses, arranged by the State Health Department and paid with Social Security Funds. He mentioned it was difficult to arrange courses in some parts of the State. Although he had no idea of the amount of funds available for next year, he thought it would be no less than last year (\$2,900) and might be more. Dr. Biddle urged the Michigan State Medical Society to continue its same interest in post-graduate work which may be the solution for some of the problems facing the profession at this time. Dr. Cummings reported that the attendance last year was 1,454, and the work was growing in interest.

The members of the Advisory Committee on P. G. Education, and the interested guests, were thanked for their attendance and helpful advice.

The Executive Committee discussed the various recommendations, and moved that it is the sense of the Executive Committee that it is favorable to the proposed endowment fund for post-graduate work, that it requests the Advisory Committee on Post-graduate Education to make a further study of this proposal, and that at a later date it report to the Council for further consideration by the House of Delegates of the Michigan State Medical Society; the motion of Drs. Carstens-Reeder was carried unanimously.

The Secretary was instructed to congratulate Dr. B. R. Corbus on his appointment as Chairman of the Joint Committee on Health Education.

11. *Report of the Committee on Economics*.—Dr. Ralph H. Pino, Chairman, reported on his com-

mittee's study of House Bill 202, House Bill 400, Senate Bill 116, and certain activities of the Legislature in connection therewith. This was generally discussed by all present, including members of the Economics Committee and Drs. G. S. McClellan and Wm. P. Woodworth, invited guests present. The Chair stated that the Michigan State Medical Society officers always welcome suggestions, and that best results are obtained when all business affecting the entire profession is carried on through regular channels, as per the ruling of the Michigan State Medical Society House of Delegates on numerous occasions.

12. *Medical Consulting Services in Penal Institutions.*—A letter from the Parole Commission was read, outlining in effect its suggestions made to the Executive Committee on May 13. This was generally discussed. Motion of Drs. Carstens-Brunk that the Executive Committee accept the suggestions of the Parole Commission, and that a committee be appointed to work out further details. Carried unanimously.

The chair appointed to the committee: Drs. P. A. Riley of Jackson, Chairman; R. B. Allen, Detroit; L. Fernald Foster, Bay City; I. W. Greene, Owosso.

13. *Thanks to Legislative Committee.*—Dr. Greene stated that the Basic Science Law had been passed due to the tremendous work of the Michigan State Medical Society Legislative Committee, the county societies' legislative and policy committees, "key-men" throughout the state, and Dean R. T. Lakey, and that thanks are due to all, especially to the Legislative Committee and its chairman, Dr. L. G. Christian. Motion of Drs. Carstens-Brunk that the Executive Committee write a letter to Dr. L. G. Christian and the Legislative Committee, expressing the sincere appreciation of the Executive Committee on behalf of The Council for the earnest energy, indefatigable work and great personal sacrifice incurred in enacting into law a public health measure, the Basic Science Law. Carried unanimously.

14. *Grand Rapids Local Committee.*—Changes in the personnel of the Grand Rapids Committee for the State Meeting were approved as follows: The Committee: Dr. M. S. Ballard, Chairman; Dr. Leon DeVel; Dr. Wm. R. Torgerson; Dr. A. V. Wenger; and Dr. Paul Blossom.

15. *Membership Certificate.*—The request of a member for two membership certificates, an original and a copy, one for each of his offices, was discussed. The Executive Committee felt that only one certificate should be issued to each member.

16. *Miscellaneous.*—Dr. Henry Cook spoke of the State Society program of activities for the year 1937-38, and recommended a Summer meeting with officers of the Michigan State Medical Society and representatives of other groups in Michigan, such as the universities. Dr. Urmston spoke of the advantages of a meeting of the Michigan State Medical Society Executive Committee with the Executive Committee of the State Bar of Michigan, in the near future.

17. *Adjournment.*—The meeting was adjourned at 10:15 p. m.

COUNCIL AND COMMITTEE MEETINGS

1. May 27, 1937—Advisory Committee on Post-graduate Education—Wayne County Medical Society Building, Detroit.
2. June 16, 1937—Executive Committee of The Council—Hotel Statler, Detroit—2:00 P. M.
3. June 16, 1937—Medical Economics Committee—Hotel Statler, Detroit—2:00 P. M.
4. June 23, 1937—Maternal Health Committee—Hotel Statler, Detroit—11:00 A. M.
5. July 13, 1937—Legislative Committee—Hotel Olds, Lansing—6:00 P. M.

SUPPLEMENTARY ROSTER

Berrien County

Gunn, J. W.....Watervliet

Calhoun County

Harris, Rowland W.....Battle Creek

Genesee County

Gutow, I.....Flint

Jefferson, H. A.....Flint

Kurtz, J. J.....Flint

Rynearson, W. J.....Fenton

Irvine, E. A.....Flint

Jickling, D. S.....Flint

Corbett, B. F.....Flint

Streat, R. W.....Flint

Moore, Kenneth.....Flint

Houghton County

Burke, J. J.....Hubbell

Janis, A. J.....Hancock

Stewart, Marshall.....Houghton

Ionia-Montcalm County

Holland, A. E.....Belding

Jackson County

Nichols, R. H.....Leslie

Quillen, R. D.....Chelsea

Marquette-Alger County Medical Society

McIntyre, D.....Negaunee

Berry, Richard.....Morgan Heights

McCann, N. J.....Ishpeming

Oakland County

Gately, C. R.....Pontiac

Hackett, Daniel.....Pontiac

Wayne County

Ames, Chester C.....Detroit

Altman, Raphael.....Detroit

Bennett, Z. B.....Detroit

Bittker, I. I.....Detroit

Bicknell, Frank B.....Detroit

Carson, Herman J.....Detroit

Cole, Wyman C. C.....Detroit

Cushman, H. P.....Detroit

Cavell, Roscoe Wm.....Dearborn

Craig, Henry R.....Eloise

Deloney, J. L.....Detroit

Dreyer, A. E.....Detroit

Feneck, Harold B.....Detroit

Frazer, H. F.....Detroit

Falick, Mordecai Louis.....Detroit

Gitlin, Charles.....Detroit

Hodges, Roy W.....Detroit

Hull, Robert C.....Detroit

Heitman, Kenneth A.....Detroit

Humphry, R. C.....Wyandotte

Israel, J. G.....Detroit

Keim, H. L.....Detroit

Lofstrom, James E.....Detroit

Loranger, Guy L.....Detroit

Loving, William J.....Detroit

Mason, Percy W.....Detroit

McColl, Clarke.....Detroit

McCormick, Francis T.....Detroit

McLaughlin, Nelson.....Detroit

Prendergast, John J.....Detroit

Rexford, Walton K.....Detroit

Robinson, R. G.....Detroit

Sauter, Simon H.....Detroit

Sawicki, B. J.....Detroit

Schiller, A. E.....Detroit

Schmidt, Harry E.....Detroit

Speck, Carlos C.....Detroit

Townsend, Kyle E.....Detroit

Wall, Joseph A.....Detroit

Weiner, I.....Detroit

Whalen, Neil J.....Detroit

COUNTY SOCIETIES

BAY COUNTY

A. L. ZILIAK, M.D.
Secretary

The Bay County Medical Society closed its meetings for the summer recess with a business meeting, Wednesday evening, May 26.

Previous meetings were held as follows:

Wednesday, April 28.—Dr. David Philips, psychiatrist for the Parole Board.

Wednesday, May 12.—Dr. Robert Dieterle, Ann Arbor, "The Mind-Body Problem."

Wednesday, May 19.—A joint meeting with the Bay County Bar Association. This was a most interesting meeting for the discussion of mutual problems.

Wednesday, May 26.—A business meeting at which time the society decided to report to the prosecuting attorney, violations of the use of the title "Doctor." The society also gave Councilor Urmston a vote of confidence and instructed Delegate Perkins to renominate him at the Annual Meeting.

During the last week in June, the society will hold its Annual dinner-dance and Ladies' Night at the Bay City Country Club.

CALHOUN COUNTY

WILFRID HAUGHEY, M.D.
Secretary

The May meeting of the Calhoun County Medical Society was called to order Tuesday evening, May 4, at the American Legion Club House, following dinner, by President Brainard.

The minutes of the April meeting were approved as published in the Bulletin.

The secretary read a communication from the District Nurses Association, thanking us for co-operation in their project of a nurses' register, also as to the holding of 1938 State Nurses' Association meeting in Battle Creek.

Letters were read from the State Secretary with special reference to the Basic Science law, which has passed the house and is now in the Judiciary Committee of the Senate.

The following excerpt from the *Kalamazoo Academy of Medicine Bulletin* was read by the secretary:

"Dr. F. T. Andrews stated he had a communication from Mrs. John Zeedyke relative to unmarried pregnant women. Heretofore, they have been sent to Ann Arbor, the Florence Crittenden Hospital or the Children's Hospital of Detroit. In as much as the two local hospitals, Borgess and Bronson, have been approved and would receive a fee of four dollars per day and the physician would receive a total fee of fifteen dollars for his services, Dr. Andrews suggested that girls in those circumstances go through the economical and medical filter and receive local care."

Dr. Andrews was present as a guest and made some comments. It was decided that we adopt the same plan in Battle Creek and Calhoun County.

There being no further business, Dr. Elmer L. Eggleston was asked to introduce the speaker. Dr. Eggleston told some stories on his friend, then introduced Dr. Harry L. Bockus, of Philadelphia, The Post-graduate School of Medicine.

Dr. Bockus commented on our fight for rights of the profession and of the public as against special privilege, and said they had been writing letters and filling out petitions for months in Pennsylvania, where he thought there were the most organized cultists, etc., opposed to everything medical.

He gave a very good talk with lantern slides, showing cases of malignant granulomas of the intestine and kindred conditions. The diagnosis is exacting but depends on a progressive barium meal with x-ray study and hourly readings. The condition so far has responded to surgical treatment.

The discussion included Drs. Eggleston, Mustard, Stiefel, Dickson, Kolvoord, Upson, Capron and Slagle, several of whom reported similar cases.

The meeting adjourned. Attendance at dinner, 51; at meeting, 69.

CASS COUNTY

KENNETH C. PIERCE, M.D.
Secretary

The May meeting of the combined Cass and Berrien County Medical Societies was held in Dowagiac May 20, 1937. About thirty-five members were present.

The meeting was called to order by Dr. S. E. Bryant, President. Business was deferred until a later date in consideration of the long distances several of the speakers had to travel.

The program, which was greatly appreciated by those present, was a "State Society Night." The following officers of the Michigan State Medical Society were on the program and gave short talks concerning the State Society's activities: Dr. Henry E. Perry, of Newberry, President; Dr. L. Fernald Foster, of Bay City, Secretary; Dr. P. R. Urmston, of Bay City, Chairman of Council; Dr. F. T. Andrews, of Kalamazoo, Councillor of the 4th District; Dr. W. Haughey, of Battle Creek, Councillor of the 3rd District; Dr. R. H. Holmes, of Muskegon, Councillor of the 11th District; Wm. J. Burns, Executive Secretary.

The combined societies feel that they are not only better acquainted with the activity of the State Society this year but also now know the leaders in the best showing that our organization has had to date.

Among those present were: Drs. J. H. Kelsey, Cassopolis; W. C. McCutcheon, Cassopolis; William Littlejohn, Bridgman; A. F. Bliesmer, St. Joseph; J. J. McDermott, St. Joseph; C. S. Emery, St. Joseph; J. K. Hickman, Dowagiac; W. R. Lyman, Dowagiac; G. R. Herkimer, Dowagiac; Bertha M. G. Anderson, St. Joseph; W. C. Ellet, Benton Harbor; D. W. Thorup, Benton Harbor; Harry Kok, Benton Harbor; Carl A. Mitchell, Benton Harbor; Stanley E. Bryant, Dowagiac; R. C. Conybeare, Benton Harbor; Harold Cawthorne, Benton Harbor; R. U. Dunnington, Benton Harbor; K. C. Pierce, Dowagiac; and J. H. Jones, Dowagiac.

EATON COUNTY

THOMAS WILENSKY, M.D.
Secretary

The regular May meeting of the Eaton County Medical Society was held on the evening of Thursday, May 27, at the Carnes Tavern, Charlotte. Twenty members, lured by the promise of succulent steaks, sat down to a dinner which fully justified its advance publicity.

Following dinner and the reading of the minutes by the Secretary, President H. A. Moyer called

upon Dr. B. P. Brown to introduce the speaker, internist Dr. C. C. Corley of Jackson.

Dr. Corley's subject was "Endocrinology and General Practice." In a beautifully outlined, comprehensive survey of all the glands of internal secretion, and dwelling significantly on the pituitary and thyroid glands, the speaker brought to his attentive audience a wealth of information outstanding for its simplicity and practical in its applications. The speaker concluded his talk by showing lantern slides of cases of the "before and after" variety and charts depicting treatment and results. A most enthusiastic vote of thanks was accorded Dr. Corley for this splendid presentation.

The June meeting of the Eaton County Medical Society will be devoted to the transaction of business matters and the election of officers. Your reporter wishes therefore to take this opportunity to broadcast through the medium of the MICHIGAN STATE MEDICAL SOCIETY JOURNAL the appreciation of the officers and members of the Eaton County Medical Society for the splendid clinical programs it has been favored with during the past year. Our speakers were for the most part, men who are not heralded in national circles, but rather, medical men, keenly interested in their work and happy to accept the call to appear before our small society without charge.

Again, let me say, that our programs have been wonderfully fine and our hats are off to these men and their like, whom we consider the finest type of practitioners in the country.

KALAMAZOO COUNTY

LOUIS W. GERSTNER, M.D.

Secretary

The May meeting of the Kalamazoo Academy of Medicine was held the evening of Tuesday, May 17, in the Columbia Hotel. Dr. Wm. Hoebeke, President, presided. The minutes of the previous meeting were approved as printed in the Bulletin.

Mr. Carl C. Blankenburg asked that a committee be appointed from the Academy to cooperate with a group of interested laymen in the formation of plans for a permanent memorial to Dr. A. W. Crane. Dr. Hubbell moved that the chair appoint such a committee. Seconded by Dr. Fast. Carried. Dr. Hoebeke appointed Dr. Crum, as chairman, Drs. Hubbell and Shackleton on this committee.

Discussion of other business was deferred in courtesy to the many guests and to the noted speaker, Dr. Frank H. Lahey.

GENESEE COUNTY

C. W. COLWELL, M.D.

Secretary

The meeting of the Genesee County Medical Society was held at the Dresden Hotel, May 20, 1937, 8 p. m.

The meeting was called to order by President Dr. Alvin Thompson. Minutes of the last meeting were read and approved.

Several communications were read by the Secretary before being placed on file.

A resolution adopted by the Board of Directors at a meeting held May 17, 1937, concerning the health coordinating plan was read by the Secretary.

It was moved by Dr. L. L. Willoughby that the resolution be accepted by the Society. Seconded and passed.

It was moved by Dr. H. E. Randall that the chair appoint six general practitioners, the names of which should be presented to the City Commission

as nominees, two of which could be chosen. Seconded and passed.

Dr. Malfroid spoke for the Maternal Health Committee concerning Mr. Knudsen's fund. He then read a resolution and asked the society to accept it and forward it to Mr. Knudsen. It was moved by Dr. Benson that this be accepted and passed. Seconded and passed.

Dr. Halligan then read a resolution concerning the advisability and necessity of paving Kearsley Street from the now existing pavement of Kensington, so that a better approach would be provided for transportation to St. Joseph's Hospital. He then moved that the Society go on record as unanimously supporting this resolution, and that copy of such be sent to Mr. Pollock.

NORTHERN MICHIGAN

G. B. SALTONSTALL, M.D.

Secretary

The April meeting of the Northern Michigan Medical Society was held on Thursday evening, the eighth, at the Hotel Perry, Petoskey, following dinner at the Laggis Cafe. The meeting was called to order by the President, Dr. E. A. Christie, with nineteen members and the guest speaker present.

The scientific program was given by Dr. William G. Gamble of Bay City. Dr. Gamble's talk and the discussion which followed were very interesting.

A short business meeting followed. Minutes of the March meeting were read and approved. Correspondence received was read and placed on file. An appeal was made to the members to lend all the support possible towards passage of the Basic Science Bill and several members agreed to be present at the Committee hearing in Lansing.

Dr. B. H. VanLeuven read a letter from the State Department of Health announcing the Refresher Course in Pediatrics in May. It was decided to combine our May meeting with the first of the series of lectures on May 4.

The May meeting of the Northern Michigan Medical Society was held at the Hotel Perry, Petoskey, on Tuesday evening, May 4. Twelve members were present when the meeting was called to order by Vice President, Dr. Grillet.

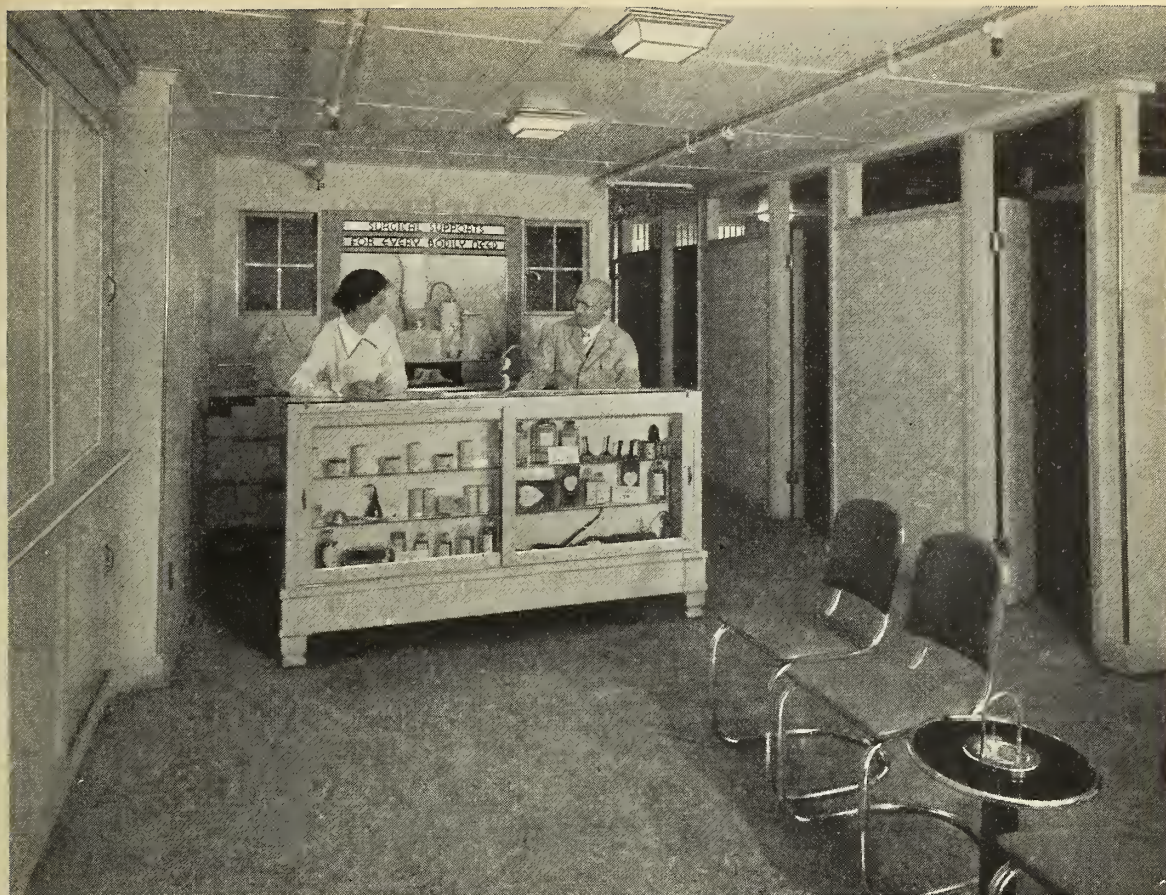
The minutes of the April meeting were read and approved. Necessary business was transacted and then the meeting was turned over to Dr. VanLeuven who in turn introduced Dr. John Sander of Lansing. Dr. Sander gave a very interesting discussion on "New Therapy in Contagious Diseases."

After a discussion of Dr. Sander's paper the meeting was adjourned.

The June meeting of the Northern Michigan Medical Society was held Thursday evening, June 10, at the Hotel Perry, Petoskey. Members present: Drs. Grillet, McClure, Conway, Frank, Stringham, Reed (Hon.), Miller, Larson, Christie, Mast, VanLeuven, Conkle, Saltontall, Chapman and one guest.

The meeting was called to order with Vice President Grillet in the chair. The minutes of the May meetings were read and approved. Correspondence was read and placed on file. Bills against the Society were read and a motion was made, seconded and passed that checks be drawn for same. Dr. Grillet appointed Drs. VanLeuven and Conkle to the program committee for July.

Moving pictures on "Low Cervical Caesarean," "Resuscitation," "Obstructive Laryngitis," and "Blood Transfusion" were presented and discussed by the members.



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 MRS. FRANK W. HARTMAN, *Press Chairman*, 7440 La Salle Blvd., Detroit.
 MRS. CARL F. SNAPP, *Secretary-Treasurer*, 980 Plymouth Road, S.E., Grand Rapids.

Jackson County

The Woman's Auxiliary of the Jackson County Medical Association has completed a successful and interesting year under the leadership of Mrs. Thomas Hackett as president, and Mrs. John Ludwick, vice president, Mrs. E. A. Thayer, secretary, and Mrs. C. E. Demay, treasurer. Bearing in mind the literal meaning of the word "Auxiliary"—confering aid—the organization has provided a medium for delightful social companionship and has offered a series of programs designed to stimulate the thinking of the members in the fields of legislation and social service. Such programs included a talk by Dr. David A. Phillips, psychiatrist at Southern Michigan State Prison, Dr. Philip Riley, who explained pending legislation affecting the medical profession, Mr. Fred Johnson, Director of the Michigan Children's Bureau, and a series of presentations of the work of local social agencies.

Several delightful programs were presented by members, such as the travel talks by Mrs. E. S. Peterson and Mrs. Walter Finton, the January Musical, in which most of the artists were from the

members, and the one-act drama, depicting a scene in any doctor's waiting room. Perhaps the climax of the year came in the colorful Pageant of the Shawls, presented at the May meeting. Such treasures of Paisley, Cashmere, Czeck, Spanish, Scottish, and other varieties of shawls as the committee discovered in the possession of the club members! But even more surprising was the talent revealed, when former President Stewart appeared as the gentle Irish mother and Mrs. John W. Page, depicting two characters with equal ability, the young woman of the nineties and the emigrant with impedimenta. Guests at this meeting were Mrs. Wenger, president of the State Auxiliary, and Mrs. Snapp, secretary. Mrs. A. M. Shaeffer, Mrs. R. H. Alter and Mrs. George Seybolt were the efficient program committee of the year.

In turning over her office to Mrs. John Ludwick, the president for the coming year, Mrs. Hackett set future goals in the inspiring quotation, "Behind us is infinite power, before us is endless possibility, around us is boundless opportunity."

The auxiliary will entertain the members of the Jackson County Medical Society at a picnic in June.

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FRACTURES AND TRAUMATIC SURGERY—Informal Practical Course; Ten-day Intensive Course starting July 12 and October 11.

OPHTHALMOLOGY—Two Weeks Intensive Course starting September 20.

OTOLARYNGOLOGY—Two Weeks Intensive Course, starting October 4.

UROLOGY—General Course Two Months; Intensive Course Two Weeks; Special Courses.

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VITAL STATISTICS FOR 1936

Final registration returns for 1936, released by the Bureau of Records and Statistics indicate a total of 54,777 deaths from all causes in Michigan, with a death rate of 10.78 per 1,000 population. This rate was an increase over the 10.05 recorded the previous year and was the highest since 1929.

Birth registrations totaled 88,457, with a birth rate of 17.41 for 1936. The birth rate is higher than in 1935 and continues the gradual rise from the depression-low rate of 15.96 in 1933. The 1936 rate is the highest since 1931.

Marriages registered by the Michigan Department of Health in 1936 reached the highest peak since 1923, with a total of 47,023 and a rate of 18.5 persons married per 1,000 population. Marriages were far in excess of the 28,552 recorded in 1932; and only in 1920, 1923 and 1924, have total marriages ever exceeded the number for last year.

Divorces kept pace with the marriage increase with a high total of 11,419—an approximate ratio of one divorce to every four marriages. Only in 1929 did divorces ever outnumber the total recorded for 1936.

INFANT AND MATERNAL
MORTALITY IN 1936

The Bureau of Records and Statistics reports that Michigan's maternal mortality rate in 1936 was the lowest ever recorded in this state. A total of 425 mothers died from causes connected with childbirth last year—a rate of 4.80 deaths per 1,000 living births. The maternal mortality rates have shown a slow decline during the past decade, but never before 1936 has the rate dropped below five deaths per 1,000 births.

A total of 4,479 infants died in 1936 before they were one year of age. The infant mortality rate was 50.63 per thousand live births. At this rate, approximately one infant in twenty did not live to be one year old. The infant mortality rate is somewhat higher than the 47.71 recorded in 1935, but it is less than the 1934 rate of 52.14.

CASES OF COMMUNICABLE DISEASE
REPORTED IN 1936

Whooping cough led the way in 1936 for the greatest number of cases reported among the communicable diseases, according to statistics released by the Michigan Department of Health. A total of 14,287 cases of whooping cough was closely seconded by 12,650 reported cases of scarlet fever. Tuberculosis ranked in third position with 7,090 cases reported.

There were 6,460 cases of gonorrhea and 6,401 cases of syphilis reported in 1936. Included among the reportable diseases were 6,116 cases of pneumonia, 2,453 cases of measles, 661 cases of diphtheria, 287 cases of typhoid fever, 152 cases of poliomyelitis, 120 cases of meningitis, and 32 cases of smallpox.

Deaths from pneumonia (all forms) totaled 4,096—the highest since 1929. Tuberculosis deaths were slightly higher with a total of 2,100 compared with 2,044 deaths in 1935. Deaths from other reportable diseases were as follows: Scarlet fever, 114; whoop-

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ing cough, 107; diphtheria, 52; typhoid fever, 37; measles, 12; and smallpox, none.

PERSONNEL CHANGES

Dr. Floyd H. DeCamp, assistant in the Bureau of Mouth Hygiene since November 1, 1936, has resigned to accept a position as director of the recently-created dental division of the Oregon State Department of Health. Dr. DeCamp will take over his new duties in June with offices at Portland, Oregon.

Dr. Ronald B. Fox, clinical instructor at the School of Dentistry, University of Michigan, has accepted the position made vacant by Dr. DeCamp's resignation. Dr. Fox will assist Dr. William R. Davis, Director of the Bureau of Mouth Hygiene, in carrying on the field demonstrations and educational programs of the bureau.

A native of New York State, Dr. Fox came to Michigan to receive his A.B. from Hope College. He graduated from the University of Michigan School of Dentistry in 1935, and since that time has served as an instructor there.

ROCKEFELLER FELLOWS STUDY MICHIGAN HEALTH ORGANIZATION

Seven Rockefeller Foundation fellows from various parts of the world will receive practical experience in the organization of state and local health programs in Michigan this summer.

Dr. C. J. W. Beckwith of Cape Breton Island has been assigned to the Saginaw County Health Department. Dr. Richard Monahan of New Brunswick, Canada, will study local health administration under the Genesee County Health Department. Miss Donna E. Kerr, assistant director of the Provincial Board of Health Laboratories of British Columbia, has been assigned to the Michigan Department of Health Laboratories for work in bacteriology.

Dr. D. K. Viswanathan of India will make a general study of the Michigan Department of Health and the local health departments. Other fellows who have been assigned to Michigan include Dr. Antal Petres of the State Hygienic Institute of Budapest; Dr. Marcel Graffar, who is an assistant to Dr. Rene Sand, technical adviser to the Belgian Ministry of Hygiene; and Dr. W. W. Yung, acting director of the health center maintained by Union Medical College of Peiping, China.

MONTHLY INCIDENCE OF COMMUNICABLE DISEASE

The incidence of scarlet fever continues unusually high, with practically no reduction in May as compared to April 1. Although figures are not available for June, it is expected that there will be a reduction during that time in keeping with the usual seasonal trend. The total number of cases so far for the year exceeds that for the same period of 1936 almost threefold. The incidence has been extremely high in Detroit and southeastern Michigan. Oakland and Saginaw counties have been among those with a particularly high incidence. More recently the severity of the disease has apparently increased. A higher percentage of severe and fatal cases are being reported.

Rubella continues to be reported from certain areas but is not widespread over the state. The incidence is apparently not on the increase.

The incidence of measles this year is very low, the same as a year ago. The greatest incidence ever experienced was in the spring of 1935.

Whooping cough incidence is running about normal.

Diphtheria shows some increase, although the

Jour. M.S.M.S.

total incidence remains very low as compared to that of five or ten years ago. This slight increase, particularly in certain areas of the state, should serve as a warning that the disease has not yet been eliminated and may increase at any time.

The smallpox incidence has again returned to a very small figure following the outbreak in Monroe County. Only an occasional case is now being reported.

Several cases of poliomyelitis are being reported—in fact, a few more than for the same period of 1936. There isn't a sufficient number of cases yet to make a prediction as to the probability of an outbreak during the coming summer and autumn.

The incidence of rabies among dogs has increased considerably, and at this time it appears to be on the upgrade. As yet there have been no human cases. The demand upon the Michigan Department of Health for rabies vaccine has been unusual. During the first five months of the year sufficient vaccine was distributed to provide the Pasteur treatment for more than 1,000 persons. The State Department of Agriculture has been striving to control the disease among dogs and has been coöperating with the Department of Health to the end that humans may be protected from the disease.

The Business Side of Medicine

(Continued from page 496)

years and know financial symptoms much as the doctor knows medical symptoms. Although far from infallible such well-chosen advisors can outline for their clients a better program of investment than can the doctor with his more limited knowledge of the field. In a similar manner the well qualified life insurance underwriter is better able to lay out plans in his field of work, just as the real estate specialist is in his.

Invest Conservatively

After protecting the future insofar as possible and after building a solid financial foundation, the way lies open for investment in stock or bonds intended to produce a maximum of income consistent with safety of the principal, and in justice to himself and his patients the doctor should invest conservatively and not allow financial worries to add to his already heavy professional cares.

Worth Knowing—He took her in his arms. "Oh, darling," he murmured. "I love you so. Please say you'll be mine. I'm not rich like Percival Brown. I haven't a car, or a fine house, or a well-stocked cellar; but, darling, I love you, and I cannot live without you!"

Two soft arms stole around his neck, and two ruby lips whispered in his ear:

"And I love you, too, darling; but—where is this man Brown?"—*London Opinion.*

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◆ General News and Announcements ◆

The One Hundred Per Cent Club of the Michigan State Medical Society:

1. Alpena County Medical Society.
2. Branch County Medical Society.
3. Cass County Medical Society.
4. Clinton County Medical Society.
5. Eaton County Medical Society.
6. Gogebic County Medical Society.
7. Ingham County Medical Society.
8. Jackson County Medical Society.
9. Lapeer County Medical Society.
10. Lenawee County Medical Society.
11. Livingston County Medical Society.
12. Luce County Medical Society.
13. Manistee County Medical Society.
14. Menominee County Medical Society.
15. Muskegon County Medical Society.
16. Newaygo County Medical Society.
17. Northern Michigan Medical Society.
18. Oceana County Medical Society.
19. Ontonagon County Medical Society.
20. Schoolcraft County Medical Society.
21. Tuscola County Medical Society.

The above County Medical Societies have paid dues in full for each and every member of the County and State Medical Society. A number of other County Societies lack but a few, sometimes only one or two, of being One Hundred Per Cent. Have YOU paid your dues?

Many friends in the medical profession of Dr. Wm. J. Stapleton, Jr., of Detroit extend their sympathy in the death of Mrs. Stapleton, who died on Tuesday, June 27.

* * *

The Washtenaw Medical and Dental Societies sponsored their First Annual Golf Tournament and Dinner at the Barton Hills Country Club, Ann Arbor, on Thursday, June 24.

* * *

Berrien and Cass County Medical Societies were hosts to the officers of the Michigan State Medical Society at a "State Society Night" program held on May 20 at the Lark-Inn Wigwam in Dowagiac.

* * *

The Kalamazoo Academy of Medicine sponsored a "State Society Night" at the Kalamazoo Country Club on May 27. Officers and Councilors of the Michigan State Medical Society were honored guests.

* * *

Lenawee County Medical Society celebrated "State Society Night" on June 15. Several officers and councilors of the Michigan State Medical Society were present and gave short talks on the activity of the State Society.

* * *

Hear the President of the Pennsylvania State Medical Association, Dr. Maxwell J. Lick of Erie, Pennsylvania, at the coming Annual Convention of the Michigan State Medical Society September 28, in Grand Rapids. Doctor Lick is one of the outstanding orators of the country.

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GENERAL NEWS AND ANNOUNCEMENTS

Dr. and Mrs. C. E. Simpson of Detroit sailed Monday, May 31, for England, where they plan an extensive motor trip and also expect to visit the continent, touching Austria, Germany and France. They will return to Detroit the latter part of August.

* * *

The Andrew P. Biddle Oration given in connection with the Annual Convention of the Michigan State Medical Society will be delivered by Dr. Elliott P. Joslin, Clinical Professor of Medicine, Harvard University Medical School, Boston, on Tuesday evening, September 28.

* * *

Dr. Babcock Resigns—Dr. Warren L. Babcock announced his resignation as superintendent and director of Grace Hospital, Detroit. He has held this position for thirty-four years. The Board of Trustees elected Dr. Edmund F. Collins to fill this place, beginning October 1, 1937. Dr. Babcock was reelected treasurer and elected a member of the Board of Trustees.

* * *

The Local Committee on General Arrangements for the 72nd Annual Convention of the State Society to be held in Grand Rapids September 27 to 30, inclusive, has been appointed by Dr. A. B. Smith, President of the Kent County Medical Society. The personnel of the committee is as follows: Dr. M. S. Ballard, Chairman, Dr. Leon Devel, Dr. Wm. R. Torgerson, Dr. A. V. Wenger, and Dr. Paul Bloxom.

* * *

New Basic Science Laws have been passed in 1937 in Colorado, Oklahoma, Kansas, and Michigan. Those states which enacted Basic Science Laws pri-

or to 1937 are Arizona, 1933; Arkansas, 1929; Connecticut, 1925; Minnesota, 1927; Nebraska, 1927; Oregon, 1933; Washington, 1927; Wisconsin, 1925; and the District of Columbia in 1929.

* * *

Michigan physicians honored at Atlantic City Session of American Medical Association. Dr. H. A. Luce of Detroit was made chairman of the Reference Committee on Rules and Order of Business of the A.M.A. House of Delegates. Dr. J. D. Brook of Grandville was selected as chairman of the Reference Committee on Miscellaneous Business and also a member of the Committee to Propose Amendments to By-laws Providing for Fitting Recognition to Fellows Rendering Distinguished Service in Science and Art of Medicine.

* * *

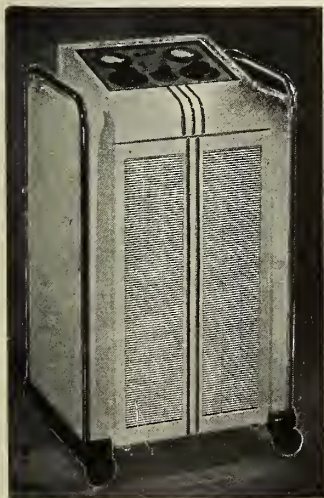
Mr. James Bechtel, executive secretary of the Wayne County Medical Society, graduated LL.B. from the Detroit College of Law, June 16. Mr. Bechtel is accorded the congratulations and best wishes of all who know him. As a worthy successor of Mr. William J. Burns, now executive secretary of the Michigan State Medical Society, Mr. Bechtel has been tireless in the performance of his duties as executive secretary, as well as in his efforts in obtaining his sheepskin in law. Both Mr. Burns and Mr. Bechtel have degrees in law.

* * *

The Highland Park Physicians' Club is sponsoring a series of articles on health in *The Highland Parker*, weekly newspaper published in Highland Park. The first article, entitled "The Human Body," appeared in the issue of May 27, and is general in nature. Other articles to follow will be contributed by various members under the club name

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In one unit, at the turn of a switch, the Burdick Triplex produces all the types of diathermy. Three separate currents, each a different wave length, covering the entire range of therapeutic application of high frequency currents.

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Short Wave Diathermy—15 meter wave length; condenser cuff or pad application. Used where electrodes on each side instead of over area treated are preferred, and areas where inductance cable application is difficult.

Electrosurgery—For cutting, coagulation and desiccation, the 70 meter circuit is preferred because of more precise control and constancy of action.

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Dr. Paul Urmston, chairman of the Council of the Michigan State Medical Society, Dr. Henry Cook, president-elect, and Dr. L. Fernald Foster, secretary. They are not out for a constitutional merely, but are on their way on the board-walk at Atlantic City to register for the meeting of the House of Delegates of the American Medical Association.

and will deal more specifically with various aspects of the subject. Readers of the column are invited to submit health questions, in writing, which will be given careful consideration and answered in the column from week to week.

* * *

Physicians attending the Annual Meeting in Grand Rapids next September should secure their hotel reservations early. The following hotels are all located within easy walking distance of the Civic Auditorium, where all Convention activities will be held:

Pantlind Hotel
The Morton Hotel
The Rowe Hotel
The Mertens Hotel
The Browning Hotel

Send in your reservation now to avoid disappointment later.

* * *

The Annual Meeting of the Upper Peninsula Medical Society will be held in Houghton, Michigan, on August 19 and 20. A program on medical economics will be given Thursday morning, August 19.

Many worthwhile scientific papers are planned which will make this annual postgraduate meeting outstanding. All members of the Michigan State Medical Society are cordially invited to attend. This is a splendid opportunity to enjoy a pleasant vacation to the incomparable "Copper Country of Northern Michigan." (See page 430 of June, 1937, JOURNAL for complete program.)

* * *

The American College of Physicians will meet in New York City, April 4-8, 1938. The Twenty-second Annual Session of the American College of Physicians will be held in New York City, with headquarters at the Waldorf-Astoria Hotel, April 4-8, 1938. Dr. James H. Means, of Boston, is President of the College, and will have charge of the program of general scientific sessions. Dr. James Alex Miller, of New York City, has been appointed General Chairman of the Session, and will be in charge of the program of clinics and demonstrations in the hospitals and medical schools and of the program of Round Table Discussions to be conducted at headquarters.

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Crippled and Afflicted Child Commitments for May, 1937:

Crippled child: Total of 230. Of the total number, ninety-one went to University Hospital; and 139 went to miscellaneous hospitals. From Wayne County (included in above totals): Total cases, sixty-seven. Of the sixty-seven cases in Wayne County, seven went to University Hospital, and sixty went to miscellaneous hospitals.

Afflicted child: Total of 1,174 cases, of which 193 went to University Hospital, and 981 went to miscellaneous hospitals. From Wayne County (included in above totals): Total cases, 346. Of the 346 cases in Wayne County, twenty-eight went to University Hospital and 318 went to miscellaneous hospitals.

* * *

The *Journal of the College of Medicine of Wayne University* will be issued the first week in June and every quarter thereafter. The first issue contains the following articles: Carcinoma of the Ampulla of Vater, by Clarence I. Owen, M.D.; Biliary Tract Disease by Charles G. Johnston, M.D.; Diagnosis of Scrotal Masses by William E. Keane, M.D.; Prerenal Azotemia by Harold Ginsberg, M.D. Several student articles are also included. The entire business and editorial staff is composed of members of the junior and senior classes of the medical college. A faculty alumni board consisting of Doctors Raymond B. Allen, O. A. Brines, J. H. Dempster, C. E. Dutchess, G. B. Myers, D. I. Sugar, C. K. Valade and Mr. M. S. Ryan will act in an advisory capacity.

* * *

The American Congress of Physical Therapy will hold its Sixteenth Annual Session in Cincinnati,

September 20 to 24. "Never before has there been such interest and enthusiasm for an annual session as is being displayed this year for the September meeting," writes A. R. Hollender, Executive Director of the Congress. Plans are being made for a large attendance which will be comfortably housed at the Netherlands Plaza Hotel. Of special interest is the scientific program with its diversified symposia, clinical conference groups, demonstration clinics and sectional meetings. Every specialty in medicine and surgery will be adequately represented. There will be no registration fee but the meeting is open only to duly licensed physicians and properly vouched for technical assistants. Plan now to attend the Congress session in September.

* * *

The Tenth Annual Graduate Fortnight of the New York Academy of Medicine will be held November 1 to 12 and will be devoted to a consideration of *Medical and Surgical Disorders of the Urinary Tract*. The subject will include Bright's disease, arterial hypertension, and infections, tumors, calculi and obstructions of the urinary tract, and will exclude venereal disease, diseases of the genitalia and gynecology. Twenty important hospitals of New York will present coordinated morning and afternoon clinics and clinical demonstrations. At the evening meetings prominent clinicians of New York and many other leading medical centers of this country who are recognized authorities in their special fields will discuss the several aspects of the general subject. The medical profession is invited to attend. A complete program and registration blank may be secured by writing Dr. Mahlon Ashford, The New York Academy of Medicine, 2 East 103rd Street, New York City.

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Kalamazoo Academy State Society Night.

On May 27, some fifty members of the Kalamazoo Academy of Medicine enjoyed a dinner at the Kalamazoo Country Club, to which had been invited the officers of the Michigan State Medical Society. They discussed legislation recently passed relating to medicine, the financial affairs of the state society, and plans for the state convention in Grand Rapids in September.

The state officers taking part in the discussion were Dr. Henry E. Perry, Newberry, state president; Dr. Henry Cook, Flint, president-elect; Dr. L. Fernald Foster, Bay City, secretary; Dr. William Hyland, Grand Rapids, treasurer; Dr. Paul Urnston, Bay City, chairman of the council; Dr. Henry R. Carstens, Detroit, councilor of first district; Dr. L. G. Christian, Lansing, chairman of the legislative committee; and Executive Secretary Wm. J. Burns.

From the success and the genuine enjoyment of fellowship it is hoped that such meetings may be made yearly events.

* * *

Upper Peninsula county medical societies will be hosts to the officers and councilors of the Michigan State Medical Society during a tour to be made by the officers in August. The tentative itinerary for the official visits to the various county medical societies of the Upper Peninsula is as follows:

Monday evening, August 16—Chippewa-Mackinac at Sault Ste. Marie.

Tuesday evening, August 17—Luce and Schoolcraft at Blaney.

Wednesday evening, August 18—Marquette-Alger at Marquette.

Thursday, August 19 and Friday, August 20—Upper Peninsula Medical Society Annual Meeting at Houghton.

Saturday noon, August 21—Houghton-Baraga-Keweenaw at Houghton.

Monday noon, August 23—Ontonagon at Ontonagon.

Monday evening, August 23—Gogebic at Ironwood.

Tuesday evening, August 24—Dickinson-Iron at Iron Mountain.

Wednesday noon, August 25—Menominee at Menominee.

Wednesday evening, August 25—Delta at Escanaba.

Officers making the tour include President Henry E. Perry of Newberry, President-Elect Henry Cook of Flint, Secretary L. Fernald Foster of Bay City, Chairman of The Council P. R. Urnston, Bay City, and Executive Secretary Wm. J. Burns. Others who will make part of the trip are Councilors F. C. Bandy of Sault Ste. Marie and W. A. Manthei of Lake Linden, Chairman of the State Society Legislative Committee L. G. Christian of Lansing, Past President Grover C. Penberthy of Detroit and Delegate to A.M.A. Louis J. Hirschman of Detroit.

* * *

Lenawee County State Society Night. Twenty-two members of the Lenawee County Medical Society were present at the Lenawee Hotel, Adrian, on Tuesday evening, June 15, on the occasion of "State Society Night." Short talks were given by officers and councilors of the Michigan State Medical Society.

Dr. Bernard Patmos, Chairman of the Program Committee, called upon Dr. L. G. Christian, Lansing, Chairman of the State Society Legislative Committee, who gave an interesting talk on the battle to secure passage of the Basic Science Law.

Mr. Wm. J. Burns, Executive Secretary of the State Society spoke of Other Legislative Activity, such as Welfare and relief measures, group hospitalization, narcotic bill, etc.

"The State Society is YOU" was the topic discussed by Dr. Wm. E. Barstow of St. Louis, Councilor from the 8th District. Dr. F. T. Andrews, of Kalamazoo, Councilor of the 4th district, spoke on "Our Job Today." Dr. Philip A. Riley of Jackson, Vice-Speaker of the House of Delegates of the

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State Society, discussed the "Problems facing the House of Delegates." "Postgraduate Pioneering in Michigan" was discussed by Dr. H. H. Cummings of Ann Arbor, Councilor of the 14th District; Dr. James H. Dempster of Detroit, Editor of THE JOURNAL spoke on "The Value of the JOURNAL to the Practitioner." Council Chairman Paul R. Urmston of Bay City talked on "What Keeps the Council Busy." "Preventive Medicine" was discussed by Dr. J. J. O'Meara of Jackson, member of the Preventive Medicine Committee. Dr. Henry Cook of Flint, President-Elect of the Michigan State Medical Society spoke on "The Future Program of Your State Society."

Among those present were:

Dr. F. J. McCue, Hudson; Dr. L. E. Blanchard, Hudson; Dr. W. T. Claxton, Britton; Dr. G. M. Claffin, Deerfield; Dr. H. H. Heffron, Adrian; Dr. Esli T. Morden, Adrian; Dr. A. L. Spalding, Hudson; Dr. O. Whitney, Adrian; Dr. A. B. Hewes, Adrian; Dr. W. E. Colbath, Adrian; Dr. W. L. Peters, Morenci; Dr. G. C. Hall, Adrian; Dr. J. P. Bland, Adrian; Dr. C. S. Lane, Hudson; Dr. P. B. Hardy, Tecumseh; Dr. F. A. Howland, Adrian; Dr. E. C. Raabe, Morenci; Dr. V. J. Murawa, Deerfield; Dr. Bernard Patmos, Adrian; Dr. A. W. Chase, Adrian; Dr. W. S. Mackenzie, Adrian.

* * *

Dr. Burton R. Corbus
Chairman of Joint Committee

The Joint Committee on Health Education at its annual meeting on Friday, June 11, at Ann Arbor unanimously elected Dr. Burton R. Corbus of Grand Rapids as chairman for next year to succeed Dr. Alexander G. Ruthven, president of the University of Michigan. In submitting his resignation, Dr. Ruthven stated that the multiplicity of his committee assignments and his firm belief that the chairmanship of the committee should be held by different individuals from time to time prompted him to request that the committee choose a new chairman.

The Joint Committee was organized through the initiative of the Michigan State Medical Society in cooperation with the University of Michigan in 1921. The chairmanship of the Committee has been held by the President of the University of Michigan since the Joint Committee was created. Through the years other organizations have been invited to membership in the Joint Committee until it is now comprised of the following organizations:

Michigan State Medical Society.
University of Michigan.
Michigan Department of Health.
Michigan State Dental Society.
Wayne University College of Medicine and Surgery.
Michigan Hospital Association.
Michigan Tuberculosis Association.
Michigan State Nurses Association.
Wayne County Medical Society.
Michigan State College.
State Conference of Social Work.
State Department of Public Instruction.
Michigan Division American Red Cross.
Probate Judges Association of Michigan.
Michigan Education Association.
Michigan Public Health Association.
Michigan School Health Association.
Michigan Association of Sanitarians.
Michigan Congress of Parents and Teachers.
Woman's Organization for Non-Partisan Reform.
Michigan State Federation of Women's Clubs.
Michigan Home Economics Association.
Michigan Physical Education Association.
Michigan Society for Mental Hygiene.
State Organization of Public Health Nurses.

Dr. Burton R. Corbus has represented the Michigan State Medical Society on the Committee for a number of years and has been actively interested in its program. As chairman, he is particularly well fitted to represent the Michigan State Medical Society and to guide the activities of the Joint Committee next year.

At this early date, fifty-three firms have contracted for exhibit space at the 72nd Annual Convention and Exhibition of the Michigan State Medical Society to be held in Grand Rapids Civic Auditorium, September 27, 28, 29, 30, 1937. Following is a list of exhibitors with home office addresses and the booth number at the Convention:

Name of Firm	City	Booth Number
A. S. Aloe Company	St. Louis, Mo.	A-2
American Seating Company	Grand Rapids, Mich.	F-6
Arlington Chemical Co.	Yonkers, N. Y.	D-8
Bard-Parker Company, Inc.	Danbury, Conn.	B-4
The Borden Sales Co., Inc.	New York City	A-4
Burroughs Wellcome & Company, Inc.	New York City	E-3
S. H. Camp Company	Jackson, Mich.	B-10
Coca-Cola Company	Atlanta, Ga.	B-1
R. B. Davis Sales Corp.	Hoboken, N. J.	E-2
Detroit Branch, American Pharmaceutical Assoc.	Detroit, Mich.	D-2
Detroit X-Ray Sales Co.	Detroit, Mich.	E-8
The Doak Company	Cleveland, Ohio	E-6
The Ediphone Company	Detroit & Grand Rapids	C-8
H. G. Fischer & Company	Chicago, Ill.	A-8 and A-9
General Electric X-Ray Corp.	Chicago, Ill.	F-8
Gerber Food Products	Fremont, Mich.	B-3
Hack Shoe Company	Detroit, Mich.	G-2
H. J. Heinz Company	Pittsburgh, Pa.	D-3
Holland-Rantos, Inc.	New York City	F-1
Horlick's Malted Milk Corp.	Racine, Wis.	C-6
G. A. Ingram & Company	Detroit, Mich.	E-4 and E-5
The Jones Surgical Supply Company	Cleveland, Ohio.	F-4
Kellogg Company	Battle Creek, Mich.	C-4
A. Kuhlman & Company	Detroit, Mich.	G-3
Lea & Febiger	Philadelphia, Pa.	D-4
Lederle Laboratories	New York City	C-1
J. B. Lippincott Company	Philadelphia, Pa.	D-5
M. & R. Dietetic Laboratories	Columbus, Ohio	D-6
McIntosh Electrical Corp.	Chicago, Ill.	F-5
Mead Johnson & Company	Evansville, Ind.	B-5 and B-6
Medical Arts Pharmacy	Grand Rapids, Mich.	C-2 and C-3
Medical Case History Bureau	New York City	A-7
Medical Protective Company	Wheaton, Ill.	A-3
Merck & Company	Rahway, N. J.	B-7
The Wm. S. Merrell Co.	Cincinnati, Ohio	B-9
Middlewest Instrument Co.	Chicago, Ill.	E-1
Philip Morris Co., Ltd.	New York City	B-8
C. V. Mosby Company	St. Louis, Mo.	A-6
Parke Davis & Company	Detroit, Mich.	G-9, G-10 G-11, G-12
Pelton & Crane Company	Detroit, Mich.	A-5
Petrolagar Laboratories, Inc.	Chicago, Ill.	D-1
Physicians Equipment Exchange	Detroit, Mich.	C-7
Picker X-Ray Corporation	Chicago, Ill.	F-3
Professional Management	Battle Creek, Mich.	G-8
Randolph Surgical Supply Company	Detroit, Mich.	H-9
W. B. Saunders Company	Philadelphia, Pa.	B-2
Standard X-Ray Equipment Co.	Detroit, Mich.	E-7
E. R. Squibb & Sons	New York City	C-5
Van Hoosen Farm	Rochester, Mich.	G-7
Wall Chemicals Co.	Detroit, Mich.	D-10
Western Electric Hearing Aids	Detroit, Mich.	G-13
The Zemmer Company	Pittsburgh, Pa.	F-2
Zimmer Manufacturing Co.	Warsaw, Ind.	B-12

Doctor, if there are other firms with which you are dealing, invite and urge them (through their detail men) to enter a display in the M.S.M.S. Exhibit at Grand Rapids. Please send the firm's name to your Executive Office, 2020 Olds Tower, Lansing.

Many Michigan physicians attended Atlantic City Session of American Medical Association June 7 to 11, inclusive. Nearly 200 physicians from all parts of Michigan registered at the Eighty-Eighth Annual Convention of the A. M. A. held in the mighty



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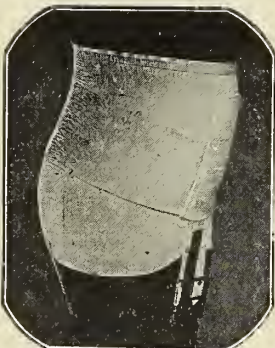
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Convention Auditorium at Atlantic City, New Jersey. The total registration which was near the ten thousand mark included physicians from every state in the United States. Among those from Michigan who registered were the following:

Drs. Max Abramson, Detroit; Herman Albrecht, Detroit; I. M. Altshuler, Detroit; Louis J. Bailey, Detroit; William C. Behen, Lansing; Harry S. Berman, Detroit; Robert Berman, Detroit; Albert Bernstein, Detroit; Robert M. Bradley, Flint; J. D. Brook, Grandville; A. L. Brooks, Detroit; W. L. Brosius, Detroit; George M. Brown, Bay City; O. A. Brines, Detroit; J. D. Bruce, Ann Arbor; G. Clare Bishop, Almont; John C. Bugher, Lansing; Jacob H. Burley, Port Huron; Samuel A. Butler, Pontiac; Nils O. Byland, Battle Creek; George H. Caldwell, Kalamazoo; Don M. Campbell, Detroit; L. A. Campbell, Saginaw; R. H. Campbell, St. Clair; Donald Chandler, Grand Rapids; Ferdinand Chenik, Detroit; W. R. Chynoweth, Battle Creek; William R. Clinton, Detroit; Richard C. Connelly, Detroit; Henry Cook, Flint; E. L. Cooper, Detroit; Moses Cooperstock, Marquette; John J. Corbett, Detroit; Burton R. Corbus, Grand Rapids; Albert S. Crawford, Detroit; Milton A. Darling, Detroit; James E. Davis, Ann Arbor; Russell DeJong, Ann Arbor; Leon DeVel, Grand Rapids; L. H. Denham, Grand Rapids; J. Lewis Dill, Detroit; Malcolm P. Dillard, Detroit; Howard P. Doub, Detroit; Bruce H. Douglas, Detroit; George G. Downer, Detroit; James C. Droste, Grand Rapids; Donald C. Durman, Saginaw; Charles E. Dutches, Detroit; Elmer L. Eggleston, Battle Creek; Robert J. Elvidge, Detroit; Lloyd L. Ely, Detroit; Joseph Eschbach, Dearborn; C. G. Fahndrich, Battle Creek; Meryl M. Fenton, Ann Arbor; Ward S. Ferguson, Grand Rapids; Mary Margaret Frazer, Detroit; Daniel P. Foster, Detroit; L. Fernald Foster, Bay City; Hugo Freund, Detroit; Warren E. Forsythe, Ann Arbor; A. C. Furstenberg, Ann Arbor; W. G. Gamble, Jr., Bay City; Wm. H. Gordon, Detroit; S. E. Gould, Eloise; Gerald O. Grain, Detroit; Lucile R. Grant, Grand Rapids; T. R. K. Gruber, Eloise; E. Walter Hall, Detroit; Eugene A. Hand, Saginaw; F. W. Hartman, Detroit; Jesse T. Harper, Detroit; L. C. Harvie, Saginaw; Clyde K. Hasley, Detroit; Parker Heath, Detroit; M. H. Hoffman, Eloise; Thomas W. K. Hume, Auburn Heights; Dan R. Herkimer, Lincoln Park; Charles L. Hess, Bay City; L. J. Hirschman, Detroit; Fred J. Hodges, Ann Arbor; Don M. Howell, Alma; Louis Hromadko, Detroit; A. M. Hume, Owosso; Robert Jenichen, Saginaw; W. J. Johnson, Ann Arbor; Reuben L. Kahn, Ann Arbor; Louis E. Kamin, Detroit; David M. Kane, Sturgis; Henry J. Kehoe, Detroit; H. L. Keim, Detroit; J. C. Kenning, Detroit; C. R. Keyport, Grayling; Fred C. Kidner, Detroit; N. A. Kilgore, Detroit; Melbourne King, Detroit; Herbert J. Kollet, Detroit; Harold J. Kullman, Detroit; Leonard Lang, Detroit; R. Leiser, Eloise; Harry Liefiers, Grand Rapids; Ezra Lipkin, Detroit; Bruce C. Lockwood, Detroit; Maurice C. Loree, Lansing; E. J. Lynch, Detroit; Aileen MacKenzie, Ypsilanti; Joseph E. Malcomson, Detroit; E. G. Martin, Detroit; W. H. Martin, Detroit; Earl W. May, Detroit; Carey P. McCord, Detroit; Thomas A. McDonald, Monroe; D. B. McDowell, West Branch; Alexander R. McKinney, Saginaw; Howard McNeill, Pontiac; F. M. Meader, Detroit; Jacob E. Meenges, Detroit; Clarence M. Mercer, Battle Creek; E. W. Meredith, Port Huron; Solomon G. Meyers, Detroit; N. F. Miller, Ann Arbor; Robert C. Moehlig, Detroit; Raymond Moon, Saginaw; Gordon B. Myers, Detroit; Robert J. Morrow, Lansing; Dwight J. Mosier, Bay City; C. L. A. Oden, Muskegon; Dayton H. O'Donnell, Detroit; Frank W. Ostrander, Freeland; B. M. Overholt, Battle Creek; Walter R. Parker, Detroit; Edward J. Panzner, Detroit; Max M. Peet, Ann Arbor; Grover C. Penberthy, Detroit; Ralph A. Perkins, Detroit; A. W. Petersohn, Battle Creek; J. P. Pratt, Detroit; John J. Prendergast, Detroit; Henry J. Pyle, Muskegon; Clara V. Radabaugh, Battle Creek; John O. Ralston, Detroit; Leo P. Rennell, Detroit; Herbert F. Robb, Belleville; J. Milton Robb, Detroit; Edward R. Robbins, Detroit; Harold D. Rubin, Saginaw; Ralph C. Rueger, Detroit; Harry C. Saltzstein, Detroit; David J. Sandweiss, Detroit; Susanne Sanderson, Detroit; John F. Sander, Lansing; Bertha L. Selmon, Battle Creek; Loren W. Shaffer, Detroit; Burt R. Shurly, Detroit; N. R. Sherman, Bay City; I. Sicotte, Michigamme; George W. Slagle, Battle Creek; Donald C. Somers, Detroit; Emil Sorock, Detroit; R. Earle Smith, Grand Rapids; Ferris Smith, Grand Rapids; Eugene J. Steinberger, Detroit; Louis J. Steiner, Detroit; Rolin H. Stevens, Detroit; Walter S. Stinson, Bay City; J. M. Sutherland, Detroit; Milton J. Steinhart, Highland Park; D. C. Stephens, Howell; Frank Stiles, Lansing; Claire L. Straith, Detroit; Don F. Strohschein, Detroit; Franklin H. Top, Detroit; V. L. Tupper, Bay City; P. R. Urmston, Bay City; C. K. Valade, Detroit; Henry F. Vaughan, Detroit; J. D. Vyn, Grand Rapids; Elmore C. VonderHeide, Detroit; R. V. Walker, Detroit; John L. Wetzel, Lansing; Bruce Whyte, Battle Creek; A. B. Wickham, Detroit; A. V. Wenger, Grand Rapids; Sherwood B. Winslow, Ann Arbor; Walter J. Wilson, Sr., Detroit; H. C. Wissman, Detroit; Robert A. C. Wollenberg, Detroit; C. J. Williams, Grosse Pointe; Edward A. Wishropp, Detroit; Don A. Young, Detroit; I. J. Zimmerman, Detroit; * * * Mr. Wm. J. Burns, Lansing; Mr. James A. Bechtel, Detroit.

Upper Peninsula Medical Society—The Fortieth Annual Meeting of the Upper Peninsula Medical Society will be held at Houghton, Michigan, on August 19 and 20. A splendid and varied program is being provided. Among the speakers are the following: Dr. Herman L. Kretschmer, Chicago, Personal Experiences in the Treatment of Bladder Neck Obstructions by Means of Transurethral Electroresection (Review of 1,000 Cases). Dr. David A. Cleveland, Milwaukee, Late Results of Intracranial Brain Trauma. Dr. Michael L. Mason, Chicago, Management of Felon, Tenosynovitis and Acute Spreading Infection of the Hand. Drs. John S. Lundy and Richard C. Adams, Rochester, Minn., Methods of Anesthesia and a Method of Blood Transfusion for the General Practitioner. Dr. John D. Steele, Jr., Ann Arbor, Treatment of Empyema. Dr. Henry K. Ransom, Ann Arbor, Acute Surgical Lesions of the Abdomen. Dr. Avery D. Prangen, Rochester, Early Treatment of Strabismus as Related to the General Practitioner. Dr. Frank N. Wilson, Ann Arbor, Coronary Occlusion. Dr. Howard K. Cummings, Ann Arbor, Importance of Examinations of the Cervix Uteri. Dr. Geza de Takats, Chicago, Vascular Accidents of the Extremities. Dr. Vernon L. Hart, Minneapolis, Orthopedic Surgery.

* * *

VENEREAL DISEASE CONTROL PROGRAM FOR MICHIGAN

Plan of the Michigan State Medical Society

1. We believe that the medical profession of the State of Michigan will give full and spirited coöperation to the national program aimed at the control of venereal diseases.
2. We believe that such a program can be more effectively carried out, at less expense to the taxpayer and with more permanency in results once the program is under way, if the family physician be made an important cog in this program.
3. We believe the education and coöperation of the physicians of Michigan can be effectively secured and more rapidly carried out, than the establishment and manning of state-wide clinics. This, we believe, is true because of the unusual unity and organization of the Michigan State Medical Society as evidenced by:
 - (a) Our public relations committee with a representative in every county society.
 - (b) Our well organized system of postgraduate instruction.
 - (c) The success of other campaigns calling for state-wide coöperation such as the maternal and infant welfare campaign.
 - (d) The policy of our State Medical Society of giving refresher courses and sending out clinical teams to non-metropolitan areas in such coöperative campaigns.
 - (e) The proposed establishment of medical coordinators acting as personal interviewers to the profession.
 - (f) Well established clinics in our metropolitan areas for diagnostic centers and practical courses in technical procedures.
 - (g) Bureau of Information of the Michigan State Medical Society which reaches the people of the entire state through 425 newspapers.
 - (h) The joint committee on Health Education with offices at the University of Michigan which collaborates with the Michigan State Medical Society in lay education.
 - (i) Weekly radio broadcasts over 18 stations under the Michigan State Medical Society.
 - (j) The JOURNAL OF THE MICHIGAN STATE

COUNTY SOCIETIES

BRANCHES OF THE MICHIGAN STATE MEDICAL SOCIETY

COUNTY SOCIETY	PRESIDENT	SECRETARY	MEETINGS	
			Regular	Annual
Allegan	G. H. RIGTERINK Hamilton	M. B. BECKETT Allegan	1st Tuesday	1st Tuesday December
Alpena-Alcona- Presque Isle.....	DR. C. A. CARPENTER Onaway	HAROLD KESSLER Alpena	Last Thursday 6:00 p. m.	Last Thursday December
Barry	H. S. WEDEL Freeport	G. F. FISHER Hastings	2nd Thursday 8:00 p. m.	1st Thursday January
Bay-Arenac-Iosco- Gladwin	DR. A. D. ALLEN Bay City	A. L. ZILIAK Bay City	2nd and 4th Wednesday (ex- cept July, Aug., Sept.) 6:00 p. m.	2nd Wednesday December
Berrien	C. S. EMERY St. Joseph	A. F. BLIESMER St. Joseph	2nd Wednesday or Thursday	2nd Wednesday or Thursday, December
Branch	BERT W. CULVER Coldwater	F. S. LEEDER Coldwater	3rd Thursday 6:30 p. m.	3rd Thursday December
Calhoun	C. W. BRAINARD Battle Creek	WILFRID HAUGHEY Battle Creek	1st Tuesday (except July and Aug.)	1st Tuesday December
Cass	S. E. BRYANT Dowagiac	K. C. PIERCE Dowagiac	2nd Wednesday or Thursday	December 15
Chippewa- Mackinac	F. J. MOLONEY Sault Ste. Marie	GEO. A. CONRAD Sault Ste. Marie	1st Friday	1st Friday December
Clinton	A. C. HENTHORN St. Johns	T. Y. HO St. Johns	1st Tuesday 7:30 p. m.	1st Tuesday October
Delta	H. O. GROOS Escanaba	NATHAN J. FRENN Bark River	1st Thursday 8:30 p. m.	December 2
Dickinson-Iron	D. R. SMITH Iron Mountain	W. H. HURON Iron Mountain	1st Thursday 6:30 p. m.	1st Thursday December
Eaton	H. A. MOYER Eaton Rapids	THOMAS WILENSKY Eaton Rapids	Last Thursday	No set date
Genesee	ALVIN N. THOMPSON Flint	C. W. COLWELL Flint	2nd and 4th Tuesday (except July and August)	2nd Tuesday November
Gogebic	C. C. URQUHART Ironwood	F. L. S. REYNOLDS Ironwood	3rd Tuesday	3rd Tuesday December
Grand Traverse- Leelanau-Benzie ..	DWIGHT GOODRICH Traverse City	E. F. SLADEK Traverse City	1st Tuesday 8:00 p. m.	1st Tuesday December
Gratiot-Isabella- Clare	KENNETH P. WOLFE Breckenridge	RICHARD L. WAGGONER St. Louis	3rd Thursday	3rd Thursday December
Hillsdale	LUTHER W. DAY Jonesville	E. G. McGAVRAN Hillsdale	1st Tuesday	1st Tuesday January
Houghton-Baraga- Keweenaw	L. E. COFFIN Painesdale	C. A. COOPER Hancock	1st Tuesday	1st Tuesday January
Huron-Sanilac	F. O. KIRKER Sandusky	E. W. BLANCHARD Deckerville	2nd Thursday	2nd Thursday December
Ingham	MILTON SHAW Lansing	R. J. HIMMELBERGER Lansing	3rd Tuesday 6:30 p. m.	3rd Tuesday December
Ionia-Montcalm	A. I. LAUGHLIN Clarksville	JOHN J. McCANN Ionia	2nd Tuesday 7:00 p. m.	2nd Tuesday December
Jackson	E. D. CROWLEY Jackson	H. W. PORTER Jackson	3rd Tuesday 6:30 p. m.	3rd Tuesday December
Kalamazoo- Van Buren	W. G. HOEBEKE Kalamazoo	L. W. GERSTNER Kalamazoo	3rd Tuesday 7:30 p. m.	3rd Tuesday December
Kent	A. B. SMITH Grand Rapids	J. M. WHALEN Grand Rapids	2nd and 4th Wednesday 8:15 p. m.	2nd Wednesday December
Lapeer	H. M. BEST Lapeer	CLARK DORLAND Lapeer	2nd Thursday	December or January
Lenawee	A. W. CHASE Adrian	ESLI T. MORDEN Adrian	3rd Tuesday	3rd Tuesday December
Livingston	H. L. SIGLER Howell	DUNCAN C. STEPHENS Howell	1st Friday 6:30 p. m.	1st Friday December
Luce	GEO. F. SWANSON Newberry	A. T. REHN Newberry	1st Tuesday 8:00 p. m.	1st Tuesday December
Macomb	JOSEPH N. SCHER Mt. Clemens	R. F. SALOT Mt. Clemens	1st Monday 12:00 noon	1st Monday December
Manistee	KATHRYN BRYAN Manistee	C. L. GRANT Manistee	Every Monday noon	3rd Thursday January
Marquette-Alger	E. R. ELZINGA Marquette	D. P. HORNBOGEN Marquette	No set date	December
Mason	W. S. MARTIN Ludington	CHAS. A. PAUKSTIS Ludington	No set time	No set time
Mecosta-Osceola ..	THOMAS P. TREYNOR Big Rapids	GLENN GRIEVE Big Rapids	2nd Tuesday	2nd Tuesday December

MEDICAL SOCIETY and monthly communications to our membership from the executive office.

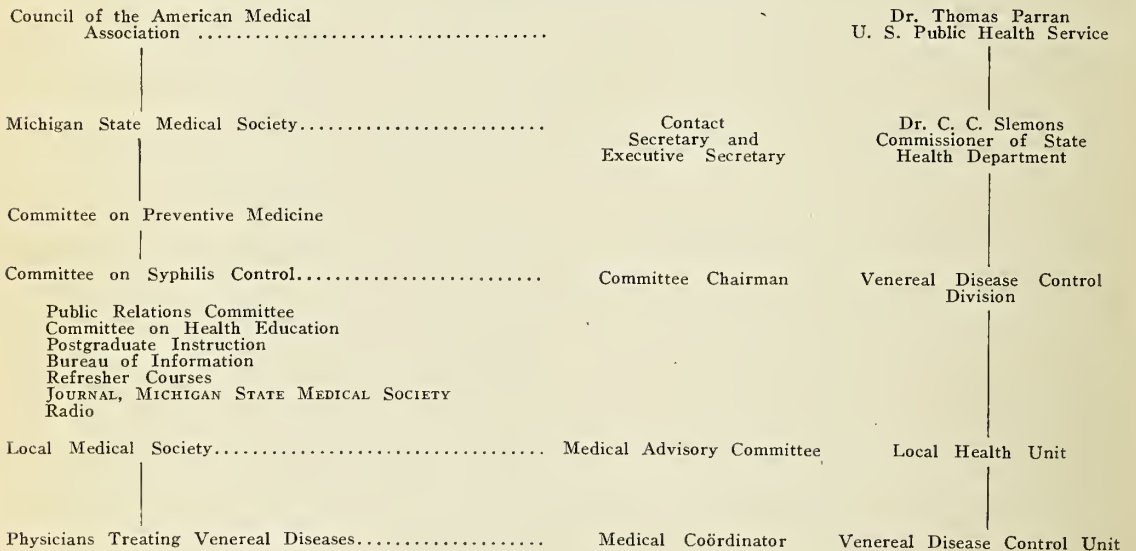
4. A well organized local Health Department on a full-time basis with technically trained personnel in coöperation with a committee of the local or County Medical Society is considered as essential to the carrying out of such a program. These units must have ample and continuous funds. There should be consultation service for the area and special laboratory work. An important duty would be to assist physicians in source and contact finding and follow up work as well as supply a medical co-ordinator as intermediary between the medical practitioners and the local health department.
5. Preparation of coöperating physicians, both with respect to approved plan of operation and technics of the various services to be rendered, should be continuously provided.
6. Laboratory service for the diagnosis and free drugs for the treatment of syphilis should be supplied to the profession. It is recommended

that physicians treating such cases be compensated for the care of the indigent and borderline cases on a fee per treatment basis.

7. It is desirable that in as far as possible a uniform plan be put in effect in all sections of the state. Treatment of venereal diseases by private physicians would be most effective in rural communities or even in cities because of a fear by patients of stigmatization. The proposed plan we feel can be applied with success and uniformity throughout the state.
8. Because of these exceptional means of reaching our local profession we would like to request that lay information as a part of the national educational program and particularly that referring specifically to treatment standards, be withheld until this program can be approved and put into execution.

The dual character of this plan with dependence upon both the health department and the medical profession as well as contacts and means of co-ordination can best be shown by the accompanying outline.

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COUNTY SOCIETIES

(Continued from page 517)

Menominee	A. R. PETERSON Daggett		3rd Thursday	3rd Thursday December
Midland	WILBUR D. TOWSLEY Midland	N. C. GREWE Midland		
Monroe	O. E. PARMELEE Lambertville	FLORENCE AMES Monroe	3rd Thursday (except July and Aug.)	3rd Thursday October
Muskegon	C. B. MANDEVILLE Muskegon	L. E. HOLLY Muskegon	Last Friday 6:00 p. m.	2nd Friday December
Newaygo	A. C. TOMPSETT Hesperia	W. H. BARNUM Fremont	As called	3rd Tuesday December
Northern Mich. (Antrim- Charlevoix- Emmet- Cheboygan)	E. A. CHRISTIE Cheboygan	GILBERT B. SALTONSTALL Charlevoix	2nd Thursday 6:00 p.m.	2nd Thursday December
Oakland	PALMER E. SUTTON Royal Oak	O. O. BECK Birmingham	3rd Tuesday (except July and Aug.)	3rd Tuesday December
Oceana	V. W. JENSEN Shelby	FRED A. REETZ Shelby	No definite date set	December
O.M.C.O.R.O. (Otsego- Montmorency- Crawford-Oscoda- Roscommon- Ogemaw)	R. J. BEEBY West Branch	C. G. CLIPPET Grayling	On call	December
Ontonagon	C. F. WHITESHIELD Trout Creek	E. J. EVANS Ontonagon	On call	January
Ottawa	W. B. BLOEMENDAL Grand Haven	K. N. WELLS Spring Lake	2nd Tuesday Noon	2nd Tuesday December
Saginaw	L. C. HARVIE Saginaw	H. C. WALLACE Saginaw	3rd Tuesday 8:30 p. m.	3rd Tuesday December
Schoolcraft	A. R. TUCKER Manistique	GEO. A. SHAW Manistique	On call	January 10
Shiawassee	C. M. WILCOX Owosso	R. J. BROWN Owosso	3rd Thursday Noon	3rd Thursday December
St. Clair	H. O. BRUSH Port Huron	GEO. M. KESL Port Huron	1st and 3rd Tuesdays Oct. to June	3rd Tuesday December
St. Joseph	JOHN O'DELL Three Rivers	JOHN W. RICE Sturgis	1st Thursday 6:30 p. m.	1st Thursday March
Tuscola	H. A. BARBOUR Mayville	B. H. STARMANN Cass City	2nd Thursday 8:00 p. m.	2nd Thursday November
Washtenaw	REED NESBIT Ann Arbor	L. J. JOHNSON Ann Arbor	2nd Tuesday	2nd Tuesday December
Wayne	C. E. UMPHREY Detroit	J. A. HOOKEY Detroit	Every Monday 8:45 p. m. (Oct. to May, incl.)	3rd Monday in May
Wexford- Kalkaska- Missaukee	GREGORY MOORE Cadillac	B. A. HOLM Cadillac	Last Thursday	Last Thursday October

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WHEN DEALING WITH ADVERTISERS PLEASE MENTION THIS JOURNAL

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

HANDBOOK OF ORTHOPÆDIC SURGERY. By Alfred Rives Shands, Jr., B.A., M.D. Associate Professor of Surgery in charge of orthopaedic surgery, Duke University School of Medicine, and Chief of the Orthopaedic Service, Duke Hospital, Durham, North Carolina; Member of the American Orthopaedic Association, The American Academy of Orthopaedic Surgeons, and the International Society of Orthopaedic Surgery. In collaboration with Richard Beverly Raney, B.A., M.D., Instructor in Orthopaedic Surgery, Duke University School of Medicine. With 169 Illustrations. St. Louis, The C. V. Mosby Company, 1937.

In this work the author has made no pretension of covering the subject with completeness, but has presented the fundamental facts and principles of orthopaedic surgery in a manner that will appeal to the student and general practitioner. It is concise, yet in sufficient detail to convey a well rounded knowledge of the subject. He has arranged the subject matter so that there is a chapter on congenital deformities and another on affections occurring in growing bone as well as one on those that occur in adult bone. His treatment of the diseases of the neuromuscular system, including anterior poliomyelitis, is well presented. Infectious processes in bones and joints are covered, with special chapters on tuberculosis. Several chapters are given to those deforming affections that affect the static mechanisms of the body. Of special interest is the chapter on affections of the low back.

SURGICAL PATHOLOGY OF THE THYROID GLAND. By Arthur E. Hertzler, M.D. Surgeon to the Agnes Hertzler Memorial Hospital, Halstead, Kansas. Professor of Surgery, University of Kansas. 238 Illustrations. Philadelphia, Montreal and London. J. B. Lippincott Company.

This is one of a series of monographs by Dr. Hertzler on surgical pathology. In this volume the various pathologic conditions of the thyroid gland, as classified by the author, are discussed from the standpoint of surgical pathology. The language is concise and clear, and there are many illustrations showing photographs of the clinical condition as seen in the patient, together with many photographs of gross specimens and of microscopic preparations. This volume would be a valuable addition to the library of the surgeon.

CLINICAL REVIEWS OF THE PITTSBURGH DIAGNOSTIC CLINIC: GUIDE POSTS TO MEDICAL DIAGNOSIS AND TREATMENT. Edited by H. M. Margolis, B.S., M.D., F.A.C.P., Contributors, H. M. Margolis, M.D., H. G. Schleiter, C. H. Marcy, M.D., C. C. Mechling, M.D., R. R. Snowden, M.D., L. H. Crip, M.D., G. W. Grier, M.D., and H. A. Anderson, D.D.S. Pages, 552. Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, Journal Michigan State Medical Society, 1937. Price, \$5.50.

Among the subjects discussed are constitutional biologic inadequacy, the psychoneuroses, attacks of unconsciousness and convulsive seizures, endocrinology and endocrine therapy, abnormalities of growth of pituitary origin and their treatment, the basal metabolic rate and its interpretation, concerning some diagnostic features of hyperthyroidism, hypothyroidism, Addison's disease, the diabetic comas of age, protamine insulin, fundamental facts in obesity, focal infection, several chapters on arthritis, coronary disease, and general interpretation of the electrocardiogram—forty-five chapters in all.

Each chapter is a delightful discussion of the subject embodying present day teaching. Each chapter also contains a bibliography of suggested reading. All the subjects discussed are very vital to medicine and surgery. The work cannot be commended too highly for what it is intended, namely, as a volume of clinical reviews of the various subjects in medicine.

INFANTILE PARALYSIS AND CEREBRAL DIPLEGIA. By Elizabeth Kenny, with a foreword by Herbert J. Wilkinson, Professor of Anatomy and Dean of the Faculty of Medicine, University of Queensland.

The author is a trained nurse who has the endorsement of prominent members of the medical profession who are acquainted with her work. The writer of the foreword maintains that her treatments are given only under medical supervision.

A BRIEF OUTLINE OF MODERN TREATMENT OF FRACTURES. By H. Waldo Spiers, A.B., M.D., Professor of Orthopaedic Surgery and Fracture Surgery, College of Medical Evangelists, Los Angeles. Second edition, Baltimore. William Wood and Company, 1937.

This little book of 137 pages covers the more important fractures. The illustrations are in line drawings. It is convenient for ready reference.

PERSONAL HYGIENE. By C. E. Turner, M.A., Dr.P.H., Professor of Biology and Public Health in the Massachusetts Institute of Technology; with eighty-four illustrations and three colored plates. Price, \$2.25. St. Louis: C. V. Mosby Company, 1937.

This is a non-technical work designed for college students and other lay persons interested in the subject of personal hygiene. It is highly recommended for lay readers.

OCULAR FUNDUS IN DIAGNOSIS AND TREATMENT. By Donald T. Atkinson, M.D., F.A.C.S. Lea & Febiger, Washington Square, Philadelphia. Price, \$10.00.

With the increasing significance of the ocular fundus in relationship to general disease, it is refreshing to pick up a small volume so complete, readable and satisfactory as these 136 pages of large print reading matter. There are 48 drawings and 58 colored plates, adequately described. This book will qualify as a practical contribution to the library of any practitioner of medicine and especially so to the ophthalmologist, neurologist and internist.

MECHANICS OF NORMAL AND PATHOLOGICAL LOCOMOTION IN MAN. By Arthur Steindler, M.D., F.A.C.S., Professor of Orthopaedic Surgery in the State University of Iowa, Iowa City, Iowa. 424 pages, Charles C. Thomas, Springfield, Ill., and Baltimore, Md., Price \$6.00.

Steindler's book is a thorough text and reference work on the human locomotor apparatus. The physics of joint and muscular movement are effectively treated. All parts of the trunk and appendicular region are considered and abnormal as well as normal body mechanics are dealt with. The work will form an essential part of an orthopaedic library. It is well illustrated by diagrams, photographs and drawings; it contains numerous references and a suitable index.

THE FOOT. By Norman C. Lake, M.D., M.S., D.Sc. (Lond.), F.R.C.S. (Eng.), Senior Surgeon and Lecturer on Surgery, Charing Cross Hospital; Surgeon, Bolingbroke Hospital; Director of Studies, London Foot Hospital; External Examiner in Surgery, Victoria University, Manchester; Late Senior Examiner in Surgery, University of London. 330 pages. Wm. Wood & Co., Baltimore, 1935. Price \$4.50.

In the November, 1936, JOURNAL, Morton's work on "The Human Foot" was reviewed. The present work dovetails beautifully with the former book; which was a biological study of the foot from both the structural and functional viewpoint. Though the

anatomical and functional background are treated briefly (but effectively) the major part of this text is concerned with anomalies of the foot. Injuries, infections, edematous conditions, ulcers, growths, chilblains, corns, affections of the nails, abnormalities and paralyses are the subject of a few of the twenty-six chapters and will give an idea of the extent of the book. It gives the impression of completeness and authority. The material is well indexed and is provided with a number of x-ray and photographic illustrations.

THE DIAGNOSIS AND TREATMENT OF POSTURAL DEFECTS. By Winthrop Morgan Phelps, B.S., M.D., F.A.C.S., Professor of Orthopaedic Surgery, Yale University; Orthopaedist-in-chief, New Haven Hospital; Orthopaedic Surgeon, Yale University Department of Health; and Robert J. H. Kiphuth, Assistant Professor of Physical Education, Yale University; Head Coach in Swimming, Yale Athletic Association. 180 pages. Chas. C. Thomas, Springfield, Ill., and Baltimore, Md.

This work, the result of collaboration of an orthopedic surgeon and an athletic director, deals with the mechanics of posture in individuals having no gross skeletal or muscular defects. Chapters are devoted to normal posture, body mechanics, postural examination and corrective exercises. The authors treat of posture at various age periods, and the bulk of the discussion deals with the male. They take a rational view of body mechanics and point out that the problems of weight distribution and balance are different for different age, sex and body builds.

Among Our Contributors

Dr. William M. Donald received his early and intermediate education in the public and grammar schools of Goderich, Ontario, passed with honors Senior matriculation at Toronto University and entered McGill Medical School in 1883. He graduated from Wayne University Medical School in 1887. He has filled the office of Professor of Medicine at the same school for the past fifteen years.

* * *

Dr. Frances A. Ford is a graduate of the University of Minnesota Medical School, 1921. She is a licentiate of the American Board of Radiology and was formerly associate consultant in the department of therapeutic radiology of the Mayo Clinic, Rochester, Minnesota, and instructor in radiology in the Mayo Foundation.

* * *

Dr. Clyde K. Hasley is a graduate of the University of Michigan, 1918. He was Instructor in Dermatology and also in Roentgenology, University of Michigan. He is Attending Radiologist, also Attending Dermatologist at Grace Hospital, Detroit, Mich.

* * *

Dr. Harry M. Nelson was graduated from the University of Michigan Medical School in 1920. He is a licentiate of the American Board of Obstetrics and Gynecology, and is a Fellow of the American College of Surgery. He formerly was an Instructor in the Surgical Department of the University of Michigan and Associate in Obstetrics and Gynecology at the Henry Ford Hospital. He is Gynecologist-in-Chief and Senior Attending Obstetrician at Woman's Hospital, Detroit, and also is on the visiting staff of Henry Ford Hospital, Detroit. He is Assistant Professor in Gynecology at Wayne University.

IN MEMORIAM

Dr. James A. MacMillan

Dr. James A. MacMillan of Detroit died at his summer home in Kingsville, Ontario, Monday, July 5, 1937. Dr. MacMillan was born at Strathroy, Ontario, in 1862. He received his early education in the Strathroy public schools. He later graduated with the degree of B.A. in 1887 and after normal school training taught for three years at Owen Sound and London, Ontario. He studied medicine and received his degree from the Toronto Medical School in 1893, following which time he located in Detroit. After ten years of practice in Detroit he pursued postgraduate work in surgery in London, England, returning to Detroit, where he had been in practice up to his death. He was for a number of years a member of the faculty of the Detroit College of Medicine. He was also attending surgeon at Providence Hospital, clinical proctologist at Harper Hospital and consulting proctologist at Receiving Hospital, Detroit. He was for many years divisional surgeon for the Pennsylvania Railroad. Dr. MacMillan was a Fellow of the American College of Surgeons, president of the Wayne County Medical Society in 1913, president of the Detroit Academy of Surgery in 1924. He was also a member of the Wayne County, Michigan State and American Medical Associations. He is survived by his wife and two sons, Dr. Francis B. MacMillan and Mr. Alexander R. MacMillan of Detroit.

* * *

Albert B. Walker

Dr. A. B. Walker died on April 11, 1937, following an illness of several months.

Dr. Walker was born in Toronto, Ontario, in 1872. As a young man he left Toronto to take up residence in Detroit and to enter upon a medical career. In 1899 he graduated from the Detroit College of Medicine and Surgery.

He is survived by his wife, Tamar; two brothers, Ernest W. Walker of Toronto, and Fred L. of Cleveland; three sisters, Miss Lillian Walker of Toronto, Mrs. W. C. Embury of Warsaw, New York, and Miss Mabel Oliver of Vancouver, B. C. Dr. Walker was a member of the Wayne County and Michigan State Medical Societies.

How Much Are Your Dues?

A considerable number of physicians smoke cigars; two five-cent ones each day cost for the year \$36.50. For those who use the cigarette, the annual outlay for one package daily is \$73.00.

There are few of us but who retain enough hairs upon our head to necessitate visiting the barber at fortnightly intervals. This amounts to \$9.10. Shaving is mostly done at home but even with modern perfection in safety razor blades, the average required for this chore during the year will be 100 blades, a cost of \$5.00.

What are your lodge dues for the year? How much does it cost you to swing at that elusive golf ball one afternoon a week? How much money have you invested in fishing tackle? What did that last hunting trip cost you? Your daily paper costs you around eight dollars a year.

Are medical society dues really too much?—From *The Journal of the Arkansas Medical Society*, May, 1937.

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THE JOURNAL

OF THE

Michigan State Medical Society

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AUGUST, 1937

No. 8

SKIN DISEASES IN THEIR RELATION TO DISTURBANCES OF OTHER ORGANS*

FRED WISE, M.D., and JACK WOLF, M.D.

NEW YORK

The relationship of title and subject matter obviously requires a few words of elucidation. The subject embraces such a broad territory as to defy any effort directed toward close correlation or comparative analysis. An attempt to present, within a limited compass, the manifold and diversified interrelationships between certain dermatoses and accompanying morbid processes in organs other than the skin, is like trying to fit a large subject into a small space in a mosaic pattern.

It is therefore deemed expedient, before going further, to ask oneself, "What criterion should govern the selection of material?" The answer to this question is that only certain vaguely delimited integral parts of the vast subject lend themselves to consideration and discussion; a well-ordered and well-proportioned survey would extend far beyond bounds. Hence the necessity of confining oneself to a small sphere and the avoidance, as far as possible, of letting one sphere overlap into another.

Almost any disease of the skin is capable, under certain circumstances, of provoking functional or organic changes—or both—in some other organ. A group of warts on the back of the hand conjures up no specter of concealed complications in other parts of the body; and yet, every practitioner is familiar with the fact that a wart on the *sole of the foot*, if sufficiently neglected and painful, is capable of causing not only functional but also organic structural changes in the bones, muscles and tendons of the affected extremity. (Incidentally, it is apropos to mention that warts have been cured by mental suggestion.) Such examples of cause and effect may be multiplied a thou-

sand fold: facial hypertrichosis in young women has led to melancholia and insanity; itching of the skin is sometimes a symptom of visceral cancer; itching of the nose is said to be a symptom of brain tumor; it has been asserted that spoon nails are pathognomic of achylic anemia; a small boil on the upper lip may cause death; and so on, *ad infinitum*.

In the presidential address entitled "The Field of Dermatology," Pusey delivered an exceptionally entertaining speech in which he said: "Engman has given a fine phrase, 'The skin, the mirror of the body.' He had in mind that the skin shows practically all the pathologic processes that occur in the body and that in the skin they are exposed to direct view. From another standpoint one might with equal truth speak of the skin as the mask of the body. In a small group of systemic diseases the skin characteristically reveals internal disease, in a few others it does so in rare cases, but as a rule, far from being a gossip about what goes on inside, it is a discreet protector of the body's secrets. . . . There is no more difficult part of dermatology than the interpretation of

*Read at the Michigan State Medical Society, Section on Dermatology and Syphilology, Detroit, September 23, 1936.

the general health from the condition of the skin and the interpretation of the condition of the skin from the general health."

In pursuance of the ideas expressed in these informative sentences, it might be of interest briefly to discuss certain reciprocal disease-processes which, although familiar to the dermatologist, are presumably not so well known to practitioners in other fields of medicine. It is beyond the scope of this paper to refer to more than a few pertinent illustrations.

The oftentimes severe constitutional symptoms of *erythema nodosum*, especially in children, directs such patients more frequently to the general practitioner than to the dermatologist. While the cutaneous signs in this disease are known to all, there is considerably less knowledge abroad concerning visceral symptoms. Erythema nodosum is frequently accompanied by marked constitutional disturbances, which are particularly severe in children and often retard convalescence. Rheumatoid pains are more frequent in adults, especially in the lower legs, the knee and ankle joints, while genuine articular diseases are very rare complications. Fever is at first high and parallels in severity the extent of the exanthem. But if it persists over 14 days after the eruption has disappeared it usually indicates involvement of the internal organs (Tachau). The lymph glands, lymphatics and spleen are very rarely affected. The blood count shows no essential changes at first and only occasionally anemia during convalescence. Roentgenologically the lungs exhibit, during the phase of eruption, enlarged shadows near the hilum, often including small, compact peribronchial foci, which are usually more marked on one side. These fairly considerable changes can not be confirmed, however, by percussion or auscultation. Possibly they indicate beginning tuberculosis, an assumption which is supported by the positive Pirquet test. On the other hand, erythema nodosum is not often associated with clearly tuberculous processes, so that the above positive reaction has little diagnostic value. The hilum infiltrations have been proved benign constitutional complications, spontaneously disappearing after 3 months or occasionally after two years. They are also interpreted as "epituberculous infiltrations" or inflammations corresponding to the cutaneous erythema nodules, a hypothesis which certainly requires additional

careful and serial control verification. The serous membranes are apparently little affected. Defects of the cardiac valves are also rare complications which develop, as a rule, only after a preceding angina. Temporary disturbance of vascular functioning, and temporary endo- and myocardial injuries are more often observed. The kidneys are also sometimes involved, exhibiting either temporary albuminuria or even hemorrhagic nephritis. Enteritis, obstipation and diarrhea are likewise observed as associated symptoms. Recurrent erythema nodosum is exceedingly rare, so that the disease usually confers permanent immunity.

Of the commoner eruptions characterized by the presence of foci of tuberculosis in some part of the body other than the skin, much study has been devoted to the *sarcoid group*, embracing benign miliary lupoids, also known as Schaumann's disease. In a fairly large proportion of sarcoid patients, it has been frequently shown that accompanying morbid changes, marked by an intrinsic pathologic architecture, are present in lungs and bones. Roentgenologic examination of the lungs discloses a condition which has been referred to as marmorization—a process affecting chiefly the middle and inferior portions of the lungs, to be sharply differentiated from healed or active tuberculous processes in the upper lobes. This pulmonary sarcoid mottling requires alertness in differential diagnosis on the basis of roentgenologic interpretation. Cystic disease of the bones, chiefly the phalanges, less frequently of the long bones, are being demonstrated with increasing frequency since patients are routinely subjected to roentgenologic examination. These osseous changes have been called by Jüngling, *osteitis tuberculosa multiplex cystica*, a designation based on roentgenologic findings and on histologic evidence of tuberculosis in the bone marrow, as well as successful guinea pig inoculations with bone tissue.

The reciprocal cutaneous and visceral manifestations of another common disease, acute and subacute disseminated *lupus erythematosus*, have been the subject of controversial discussions in the past few years. Recently Rose and Goldberg described the incidence (based on observation of five cases, three with necropsy findings) of marked constitutional symptoms which may precede the appearance of the skin lesions.

These include fever of a septic type, weight loss, weakness, bone and joint pains, acute attacks of abdominal pain simulating appendiceal or gall bladder disease, urinary symptoms, impairment of vision, cough, hemoptysis, headache, dyspnea, and precordial pain. Visceral lesions involving the kidneys, heart, lungs, spleen, liver, serous surfaces, joints, eyes, lymphatics and gastrointestinal tract, have been recorded. Anemia, leukopenia, albuminuria, cylindruria and pyuria are encountered in these patients. In two of their five patients, an ocular disturbance in the form of marked papilledema was found—a complication said to be rarely mentioned in the literature. These authors are of the opinion that a "review of their cases supports the conception that the disseminated skin lesions are not the principal feature of the disease, but rather the cutaneous expression of a generalized systemic disorder, whether it be sepsis, a 'toxemia,' or what not. The visceral lesions probably persist or progress during phases of cutaneous remission. Several of the clinical aspects bear a striking resemblance to subacute bacterial endocarditis. It seems probable that the syndrome described by Osler as erythema exudativum multiforme, and the cases of atypical endocarditis with facial erythema described by Libman and Sacks are either variants of, or identical with, disseminated lupus erythematosus." Somewhat analogous conclusions were arrived at by Belote and Ratner, in their recent contribution dealing with this malady. They expressed the opinion that "the so-called Libman-Sacks syndrome is a subvariety of the Osler erythema group and that the lupus erythematosus-like eruption of the Libman-Sacks syndrome is erythema multiforme, representing a bacteria-free phase of a previous sepsis." With respect to the question of sepsis, it should be pointed out that only a few isolated cases of sepsis have been reported and these have not been generally accepted as conclusive. We are in accord with the majority of dermatologists who recognize the existence of many gaps to be filled and obscure signs to be logically interpreted in this disease-complex. Incidentally, we object to the use of the designation "erythema multiforme" in reference to these eruptions. The erythema exudativum multiforme described by Hebra in 1854 is a separate and independent disease-entity; its morphology, symptomatology, occurrence and course dif-

fer conspicuously from acute disseminated lupus erythematosus and from the cutaneous manifestations of the Libman-Sacks syndrome; a better designation for such eruptions is polymorphous exudative erythema, to differentiate them from Hebra's original description.

On account of its intimate relationship to abdominal and pelvic tumors, many non-dermatologists are familiar with the rare disease, *acanthosis nigricans*, first described by Politzer and by Janowsky, in 1890. Two forms of this condition are recognized—the juvenile and the adult type. Very little is known regarding the pathogenesis of the juvenile type; obscure metabolic and endocrinologic disturbances, derangements of the functions of the abdominal sympathetics and many other morbid processes have been incriminated. Usually there is no associated malignancy, the eruption frequently runs a benign course and restitution takes place. In the adult form, cancer of the abdominal and pelvic viscera is present in the majority of cases. In some instances, benign intra-abdominal tumors have been encountered. Montgomery recently called attention to the fact that the integumentary changes in the adult type associated with visceral carcinoma, may precede symptoms attributable to abdominal neoplasms by as much as ten years. The pathogenetic factors in the adult type seem to be linked with malignancy involving the chromaffin and abdominal sympathetic system, either by direct extension, by metastasis, by pressure phenomena, or possibly by secondary toxicemic changes. In a case described by Wise in 1918, a woman aged twenty-five developed the typical cutaneous eruption about a year after a decapsulation of the kidneys was done; this operation was performed immediately after the patient had swallowed a large amount of corrosive sublimate with suicidal intent. The skin returned to normal after a course of x-ray therapy and the patient is still alive and apparently in good health.

Although a number of other diseases manifesting correlative external and internal signs and symptoms come crowding to mind, we must forbear to do more than mention a few additional examples: in diabetes, the common cutaneous complications are pruritus, eczema, furunculosis and gangrene; the uncommon ones are xanthoma, bronze diabetes and necrobiosis lipoidica diabetorum; in rheumatoid conditions,

one encounters so-called rheumatic nodules and erythema annulare rheumaticum, the latter associated with endocarditis; in a group of diseases linked with disturbances of lipoid metabolism, embracing xanthoma tuberosum and xanthelasma, cutaneous manifestations possessing individual clinical features are described under such names as lipoid-proteinosis, extracellular cholesterinosis, Niemann-Pick disease and several others. These have been comprehensively described in Jadassohn's Handbuch by Urbach of Vienna. A malady about which little has been written and less is known is the chronic indolent multiple ulceration of the legs associated with "idiopathic" colitis.

We have discussed a somewhat miscellaneous group of diseases intended to serve as illustrative examples of more or less varied pathologic changes occurring simultaneously in the same organism, and involving chiefly the skin and viscera.

Regarded from a generously broad point of view, a heterogeneous group of skin diseases may be separated into two fairly well-defined divisions: first, those eruptions which are accompanied by, or are intimately associated with, changes characterized by *parallel* pathologic (or functional) phenomena in the viscera and other organs; secondly, those eruptions which are accompanied by, or are intimately associated with, changes characterized by *divergent* pathologic (or functional) phenomena in the viscera and other organs.

Familiar examples of such parallel pathologic phenomena are the infectious granulomas—syphilis, tuberculosis, leprosy, blastomycosis, and so forth; also the hematopoietic diseases and Hodgkin's disease. But even in this well-known group, there may be deviations from parallelism with respect to the cutaneous and visceral manifestations; for example, Hodgkin's disease and leukemia may exhibit *non-specific* eruptions of urticaria, or a dermatosis closely simulating Duhring's disease, or a universal erythroderma. Occasionally one encounters cutaneous lesions in syphilis and leprosy, which have the structure of tuberculosis or sarcoid.

Examples of dermatoses symbolized by *divergent* pathologic changes in the skin and other organs are equally well known; many of them are, however, apparently closely linked with functional rather than organic disturbances of the endocrine glands; for example, circumscribed myxedema of the

legs; some of them may be related to avitaminoses; on the other hand, Addison's disease—the syndrome of diseases of the suprarenals, hyperpigmentation of the skin and mucosæ, in association with various systemic disturbances—is a conspicuous example of *coexistent but dissimilar* morbid changes in the same organism. This group embraces such diseases as scleroderma, Recklinghausen's disease, dermatomyositis and others, to be mentioned later.

It should be emphasized that in neither of these two artificial categories are we dealing with anything related to "sealed patterns." The functional and pathologic interrelationships are varied and diversified in both groups; particularly in the second group, one need not look for "fixed rules" or "constants" with respect to coexistent external and internal anomalies.

To illustrate pertinent instances of divergent pathologic manifestations, we have selected disease-complexes which are accompanied, either regularly or only occasionally, by skeletal and by ocular changes.

Recklinghausen's disease is regarded by many as a congenital nevoid anomaly originating in disturbances of the germ-plasm. The disease manifests itself as a syndrome characterized partly by morbid changes in tissues of ectodermal origin—namely the skin and the central nervous system. It is probable that early developmental disturbances involving ectodermal structures play a leading rôle in its pathogenesis. This variety of systematized neurofibromatosis is classified as a generalized disease of the peripheral, cerebrospinal and sympathetic nerves, including nerve roots and nerve stems, and involving the finest filaments in the skin, the skeletal muscles and the intestines. The cutaneous tumors comprise soft fibromas and tumors which have proved to be of mesenchymal derivation, called neurinomas. These latter have their origin in certain differentiated fibrillary structures which form a part of the mesenchymal strands; these, in turn, are said to be derived from elements of ectodermal origin, the forerunners of the so-called Schwann cells. The classification of these neurinomas is under controversy, some investigators regarding the Schwann cells as mother-cells of the nerve fibres, others contending that they constitute merely a nervous or glial supporting substance of the nerve strands. The consensus with reference to the nature

of generalized neurofibromatosis is that it portrays a symptom-complex manifested by a systematized blastomatous alteration in the peripheral and central nervous systems, preceded by a widespread congenital anomaly of the anlage of the nervous system.

The usual manifestations are the familiar pigmentary, vascular, connective tissue and nerve tissue changes occurring in the skin. In the rarer cases, the so-called Pringle type of adenoma sebaceum, affecting the face, and syringo-cystadenoma of the trunk, form part of the cutaneous manifestations. Malignant transformation of cutaneous lesions of different types have been reported as rare complications. Mental impairment is a relatively common occurrence, although many patients show no signs of impaired intellect. On the other hand, Recklinghausen's disease and *tuberous sclerosis* is a symptom-complex familiar to neuropsychiatrists, and, partly due to its rarity, has been the subject of a considerable number of publications.

In this disease coexistent morbid processes marked by a divergent pathologic architecture are referable chiefly to the skeletal system and the eye.

The most frequent *bone changes* are kyphoscoliosis, abnormalities of growth, irregularity of outline of shafts of long bones, and subperiosteal bone cysts. These skeletal disorders have been clearly described by Brooks and Lehman of St. Louis. (The Bone Changes in Recklinghausen's Neurofibromatosis. Surg., Gyn., and Obstet., 38: 587. May, 1924.) Other bone changes are characterized by softening, fragility, asymmetry of the skull, osteomalacia, enlargement of the sella turcica, syndactyly, atrophy and spina bifida. Lateral curvature of the spine is by far the most frequent skeletal complication.

The coexistence of *cataract* and Recklinghausen's disease has been noted especially in recent years. At first thought to be merely a coincidence, dermatologists are now alert in examining for cataract, vascular changes in the eye grounds and other ocular disturbances.

The simultaneous occurrence of Recklinghausen's disease, adenoma sebaceum of the Pringle type and tuberous sclerosis in the same patient, has been described as a rare complex. Naturally, this combination of disease processes gives rise to a remarkably kaleidoscopic set of symptoms, both sub-

jective and objective. In addition to the cutaneous and bony changes mentioned, and the various manifestations due to involvement of the central nervous system, such patients at times exhibit peculiar lesions involving the skin surrounding the nails of the fingers and toes. These consist mainly of papillomas, fibromas and warts, the pathologic structures of which are strikingly different from those of the other cutaneous and nerve lesions; nevertheless, they seem to form part of the symptom-complex, despite their alien nature.

The association of cutaneous manifestations with morbid changes in the bones exists in several other more or less well-defined disease processes. Among these are scleroderma and morphea, acro-dermatitis atrophicans, various forms of poikiloderma, dermatomyositis, dermatofibrosis lenticularis and a number of unclassified congenital and hereditary anomalies.

Under the title of "Cicatrizing Morphea with Ankylosing Arthritis and Osteoblastic Change," Crawford of Pittsburgh recently described an illustrative case of acute progressive morphea of the skin and subcutaneous tissue in a child. The disease involved an extensive area from the level of the sixth rib downward over the abdomen, groins, buttocks and lower extremities, and eventually resolved, leaving the skin smooth and atrophied. The condition was associated with rheumatoid arthritis, and ankylosis and a hyperplastic bony ridge in each hip joint. In a review of the literature, Crawford states that "atrophic changes of the bones and joints are occasionally associated with both the generalized and the circumscribed form of scleroderma. Rarefying osteitis with actual atrophy of the bone and decalcification, affecting especially the small bones of the hands and feet and the joints of the extremities, has been noted. Areas of increased calcification and density of the bone in conjunction with rarefying processes may occur. The most frequent diseases of the joints are of the poly-articular chronic rheumatoid type, with changes in the synovia and articular surfaces. These changes evidently develop first in the synovial membrane and affect secondarily the bones and cartilages, which become rarefied and finally atrophic. Arthritis frequently develops before the onset of scleroderma as

†Crawford, Stanley: Arch. Dermat. and Syph., 33:506, (March) 1936.

well as after its onset."† Similar conditions have been described in cases of acrodermatitis atrophicans. In a case of dermatomyositis, Stuckey of London reported the incidence of advanced osteoporosis in the bones of the hands, and Curth of New York reported another case of dermatofibrosis lenticularis which is always associated with osteopoikilosis of the long bones.

Coexisting *ocular disease* has been mentioned in connection with neurofibromatosis. Recently, attention has been directed toward the simultaneous occurrence of cataract in patients with *disseminate neurodermatitis*, and the familial occurrence of cataract in cases of *poikiloderma* has been the subject of several recent publications. The coexistence of keratitis with *rosacea* has long been recognized. Ophthalmic involvement in *pseudoxanthoma elasticum*, a degenerative disease of the elastic tissue of the skin, is manifested in a proportion of such cases by angioid streaks of the retina and by choroiditis. The question whether the two conditions are attributable to a common etiologic agent has not been determined. Grönblad considers the angioid streaks of the retina to be caused by degenerative changes in the elastic membrane, permitting the vessels to shine through it; on these grounds, he believes that the changes in the skin and the eye have a common pathogenicity. This concept is in need of verification.

These diverse ocular complications, aside from their importance to the patient and interest to every clinician, have certainly been conducive toward making the dermatologist more than ever "eye-conscious," especially with respect to eruptions of unknown or obscure etiology.

As with the organs of special sense and with the skeletal system in their relation to cutaneous diseases, so also with respect to every other organ and function in the body, our ken broadens and our knowledge increases, slowly but surely. True, many concepts in the field of dermatology are vague and unformed, just as they are in most of the other specialties. We dermatologists have many hard nuts to crack, and we are eager to learn from our non-dermatologic colleagues.

What, then, is the significance of such compilatory data as we have submitted? There is the academic interest that attaches to the comprehensive study of disease processes as a whole. But of far greater importance is the fact that it is precisely on such continued search for associations and relations that progress often depends. The dermatologist and his colleagues in other specialties must be brothers-in-arms against the common foe. When Emerson spoke of "the amassed thought and experience of innumerable minds," he might have been thinking of Medicine.

THE STORY OF CESAREAN SECTION AT THE UNIVERSITY OF MICHIGAN*

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In 1871 R. P. Harris, president of the Philadelphia Obstetrical Society, published a report on the results of cesarean operations known to have been performed in this country between 1822 and 1871. This report comprised a total of 70 cases, 59 of which were complete enough in detail to allow statistical calculation. Among these one was performed in 1869 by Abram Sager, first Professor of Obstetrics at the University of Michigan. A brief résumé of this early operation may be of interest. The patient, a rachitic dwarf with an absolute contraction of the pelvis, was in the 9th month of gestation. After six hours of labor a cesarean section was decided upon although the advisability of doing a destructive operation had been considered. Sager secured the assistance of other members of the Faculty, including the Professor of Anatomy.

In spite of a total lack of knowledge concerning the nature of the infection, and sepsis, extreme care was exercised to avoid contamination. Hemostasis was effected by "pressure" and the free application of "pure ice water." Interrupted silver wire sutures were used to close the uterus. Sager

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emphasized this closure, stating that the literature "contains reports of at least seven cases in which the uterus has been closed by sutures." He recommended suturing as "innocuous, to prevent nonclosure, secondary hemorrhage, effusion of lochia and pus from the granulating wound, with its natural sequelæ, peritonitis and adhesions, if not death." The patient died 18 hours after operation. The cause of death was given as peritonitis, but more likely was from shock.

There is no record of a cesarean section being performed by Dunster, or Martin, Sager's immediate successors. Cesarean section was more frequently utilized by Reuben Peterson, who headed the Department of Obstetrics and Gynecology from 1901 to 1931. Since 1931 these cases have been under the direct supervision of Norman F. Miller, present Professor and Head of the Department.

The following analysis of 158 cesareanized obstetrical patients covers a period of thirty-five years, 1901 to 1936. Many of the operations were performed by men during their years of training as specialists in obstetrics. In the first operation in the series analyzed, the operator, fearing hemorrhage from the incised gravid uterus, placed a tourniquet of heavy rubber tubing around the broad ligaments and lower uterine segment. Much to his surprise (he had never seen a cesarean section), there was no hemorrhage and the tourniquet was never used again.

General Statistical Information

Incidence: Previous to 1924—1.6% } 2.2%
 1924-1936—2.5% }
 Age: Average 24.6 years, youngest 12, oldest 43.
 Parity: Primipara—80
 Multipara—78
 Para 1—34 Para 6—1
 Para 2—21 Para 7—3
 Para 3—9 Para 8—1
 Para 4—5 Para 9—1
 Para 5—2 Para 10—1
 Race: White 94.8 per cent; black 5.2 per cent
 Previous section: 116—none 9—two
 32—one 1—three

Indications for Operation

A wide diversity of indications for operation existed in this series. In some cases where more than one indication was present, all those of equal importance are listed, otherwise only the primary or most important reason is tabulated:

I. Cephalo-pelvic disproportion	57		
With medical indication....	6		
With gynecological indication	6		
With eclampsia	2		
With previous section.....	19		
	<hr/>	90—90	57 Per Cent
II. Previous section	18		
Previous section and toxemia	2		
Previous section and eclampsia	2		
	<hr/>	22—22	14 Per Cent
III. Toxemia:			
Eclampsia	4		
Nephritis	1		
Polycystic kidney.....	1		
	<hr/>	6—5	3 Per Cent
IV. Sterilization by court order:			
Mental deficiency	13		
Epilepsy	1		
	<hr/>	14—14	9 Per Cent
V. Bleeding:			
Placenta previa	5		
Placenta previa and previous interposition.....	1		
Abruptio placentaë	2		
	<hr/>	8—8	5 Per Cent
VI. Miscellaneous gynecological and obstetrical indications:			
Inertia and dystocia due to rigid cervix.....	3		
Previous stillbirth	2		
Fibroids	3		
Split pelvis	2		
Neglected transverse presentation	3		
Carcinoma of cervix.....	1		
	<hr/>	14—12	8 Per Cent
VII. Miscellaneous medical indications:			
Rheumatic heart disease..	3		
Congenital heart disease..	2		
Syphilitic heart disease...	1		
Tuberculosis, lungs, and larynx	1		
Chronic nephritis with ascites, and chronic bronchitis	1		
	<hr/>	8—7	4 Per Cent

Contracted pelvis is the most frequent indication for cesarean section. In this study ninety, or more than half of the cases, were cesareanized because of cephalo-pelvic disproportion. Coexisting obstetric and medical complications (previous repair of third degree laceration of the perineum, eclampsia, heart disease and tuberculosis, etc.) in some cases offered additional indication for operation.

Abdominal operative delivery was performed on 42 patients who had had previous sections. Nineteen of these cases are listed under cephalo-pelvic disproportion and 1 under split pelvis. Two were pre-eclamptic and 2 eclamptic at the time of operation in this hospital.

Sterilization by court order formed the basis for operation in 14 cases. Of these one was an epileptic, the others were feeble-minded. Elective cesarean section combined with sterilization was considered no greater hazard in this elective group than delivery followed later by laparotomy. Furthermore, a second anesthetic and operation were avoided and hospitalization minimized. Incidental sterilization was performed in thirty-eight additional cases.

In our group six cases were cesareanized because of toxemia and an additional six cases, listed under disproportion and previous section, were toxic at the time of operation. One out of eight eclamptics or 12.5 per cent died following operation. While this tends to corroborate the general feeling regarding this method of treatment, it must not be forgotten that these cases were operated when there still existed a relatively high direct mortality following cesarean section. All of the cases indicated by eclampsia were operated prior to 1921.

Since 1931 we have recognized certain cases of placenta previa and premature separation of the placenta as justifiable indications for cesarean delivery. Of our eight cases only two were performed previous to 1929 and both were Porro cesarean sections for treatment of placenta previa. One of these had had a previous interposition operation. Both patients died.

Miscellaneous indications for operation were found in 22 cases. Three operations were performed for cervical cystocia. Two of the three cases had sustained previous cervical surgery: one a repeated cauterization, and the other a cautery followed by conization. The third case gave no history of previous cervical manipulation, but no dilatation of the cervix occurred after 32 hours of labor. Two operations were performed because of previous repeated stillbirths occurring between seven and eight and a half months gestation. One patient had had seven, and the other five previous pregnancies with no living children. Elective section resulted in viable infants in both cases. Fibroids in three cases, neglected transverse

presentation in three cases, and carcinoma of the cervix in one case prevented normal delivery. One patient with a split pelvis and complete exstrophy of the bladder, had previously had bilateral ureteral transplants into the colon and was subsequently cesareanized on two occasions. Rheumatic, congenital and syphilitic heart disease accounted for six cases, while tuberculosis of lungs and larynx, and chronic nephritis with ascites, and chronic bronchitis completed the list of miscellaneous indications.

STAGE OF LABOR OR PREGNANCY WHEN OPERATION WAS PERFORMED

Before the ninth month (8½ months).....	2
During the ninth month before term.....	13
Elective at term with no labor.....	72
During the first 6 hours of labor.....	31
After the first 6 hours of labor.....	37
At term but not mentioned as to duration of labor	3

Maternal Mortality

As there were ten maternal deaths in this thirty-four year series the absolute mortality was 6.33 per cent. Two of these were not attributable to the operation. One died from pulmonary and laryngeal tuberculosis three months postoperatively, and the other died after a left nephrectomy necessitated by ureteral obstruction due to far advanced carcinoma of the cervix. The corrected mortality therefore would be eight or 5.06 per cent. Maternal mortality according to five-year periods was as follows:

TYPE, NUMBER, DEATHS AND DEATH RATE FOR FIVE YEAR PERIODS

5-year Intervals	Classical	Low	Porro	Total	No. Deaths	Per Cent Death Rate
1902-06	2	0	0	2	0	0
1907-11	10	0	1	11	0	0
1912-16	8	0	2	10	3	30
1917-21	11	1	0	12	2	16.66
1922-26	38	6	0	44	2	4.54
1927-31	19	5	2	26	1	3.84
*1932-36	12	39	2	53	0	0
Total	100	51	7	158	8	5.06

*From January 1, 1932, until July 1, 1936.

A perusal of the above chart reveals the following points of interest:

(1) Recent preference for the low operation. (2) Decreased incidence of the Porro type of operation. (3) Gradual diminution of the maternal death rate. (4) No maternal deaths during the last four and a half years.

DEATH RATE FOLLOWING EACH TYPE OF

OPERATION

Type	Number	Maternal Deaths	Maternal Death Rate	Fetal Deaths	Fetal Death Rate
Porro	7	2	28.5%	2	28.5%
Classical	100	4	4.0%	15	15.7%
Low	51	2	3.9%	3	6.4%

The two deaths following Porro cesarean section occurred on the third and fifteenth postoperative days, as a result of septicemia. The indication for operation in both cases was placenta previa and in both instances the vagina had been packed before admission to the hospital. One was considered in fair condition with only moderate anemia, while the other had been having hemorrhage for two weeks. She had a hemoglobin of 33 per cent and bilateral pyelonephritis, with frank pus in the urine before operation.

Contracted pelvis was the indication for operation in the two cases dying following low section. One patient, a rachitic dwarf, had been in labor three and one-half hours. She had had no previous vaginal examination. Death occurred on the fifth postoperative day as a result of intestinal obstruction. Autopsy showed compression of an anomalous sigmoid colon between the involuting uterus and the sacral promontory. There were no signs of sepsis, but the heart showed hypoplasia and acute dilatation. The other patient had been in labor eighteen hours and the membranes had ruptured several hours previous to operation. She had a severe pyelonephritis which had been treated before operation by ureteral catheterization. The postoperative course was febrile for two weeks but was otherwise uneventful. Strict confinement to bed was insisted upon for an additional week. Death occurred suddenly on the fourth ambulatory day, which was the twenty-sixth postoperative day. The cause of death presumably was pulmonary embolism. Autopsy was not permitted.

There were four deaths after classical cesarean section. The indication in two of the four was contracted pelvis, both of them having had one previous section. One case was operated forty hours after onset of contractions. The patient was exhausted on admission to the hospital and died of pneumonia on the third postoperative day. The other, an elective section, had mitral stenosis and pyelitis, and died of shock during the operation. Of the two cases remaining, one,

an eclamptic, had three convulsions previous to operation and continued with post partum convulsions. Death occurred on the seventh postoperative day. Autopsy showed fibrinopurulent peritonitis, broad ligament abscess, mitral stenosis, bronchopneumonia and the effect of toxemia. The fourth case was admitted to the hospital fourteen hours after the onset of labor, in fair physical condition. Operation was performed because of complicating leiomyofibroma. The patient died of sepsis on the twelfth postoperative day.

Summary of the eight maternal deaths with respect to stage of labor and the cause of death is as follows:

Stage of labor:	
Elective at term.....	2
After onset of labor, membranes intact.....	2
After onset of labor, membranes ruptured.....	2
After previous packing of the vagina.....	2
Cause of death:	
Sepsis	4
Pulmonary embolism.....	1
(Patient had been septic)	
Intestinal obstruction (no sepsis).....	1
(Anomalous sigmoid, rachitic dwarf)	
Pneumonia	1
Shock	1

Fetal Mortality

A survey of fetal mortality reveals twenty deaths in all, or a death rate of 12.6 per cent. Death was attributed to the following causes:

Not known.....	5
Congenital heart disease.....	3
Stillborn	6
Prematurity	3
Non-viability	1
Monstrosity	1
Pneumonia (43 days after birth).....	1

Eliminating the last three and the three stillbirths diagnosed before operation (one abruptio placentæ and two neglected transverse presentations) there is a corrected fetal mortality rate of 8.8 per cent.

Maternal Morbidity

Maternal morbidity was noted in eighty-one cases. More than one cause for morbidity was found in some cases:

Febrile puerperium.....	42
Temperature 100.4 degrees for 3 days or more, with no known cause	
Puerperal sepsis	6
Wound infection	14
Breast infection	1
Pneumonia	2
Pulmonary embolism	1
Thrombophlebitis	4
Nephritis	1
Suppurative otitis media.....	1
Bell's palsy.....	1
None, other than indication for operation.....	8

The following instances were considered as attributable to the operation:

Febrile puerperium.....	42
Puerperal sepsis.....	6
Wound infection.....	14
Pneumonia	2
Pulmonary embolism.....	1
Thrombophlebitis	4

There is a 17.8 per cent maternal morbidity directly attributable to the operation, other than the usual postoperative febrile reaction.

Summary

As a result of this analysis of 158 abdominal cesarean sections the following points are considered significant:

1. The panoramic study includes the earliest case recorded in the University of Michigan Hospital.

2. The incidence of cesarean section has increased from 1.6 per cent prior to 1924 to 2.5 per cent since that time. This increase may be accounted for by the fact that certain cases of placenta previa and abruptio, as well as court order for sterilization of feeble-minded pregnant women are now accepted as justifiable indications for operation in this clinic.

3. The maximum number of sections in any one patient in this series was four.

4. The most frequent indication for the operation was cephalopelvic disproportion.

5. A combination of indications, which singly do not necessitate operation, may force the issue for operation.

6. Since 1931 our preference has been for the low type of operation.

7. In the entire group of 158 cases, maternal mortality was about the same in the low and classical types of operation.

8. Pre-operative physical condition of the patient is important.

9. Integrity of membranes is important.

10. Elective section carries the best prognosis.

11. Sepsis is the most frequent cause of death following cesarean section.

12. Corrected fetal mortality was 8.8 per cent (absolute—12.6 per cent).

13. Corrected maternal mortality for the 35 year period was 5.06 per cent (absolute—6.33 per cent).

14. There have been no maternal deaths following cesarean section in the last four and one-half years.

INDUSTRIAL DUSTS AND LUNG DISEASES*

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The lungs, as described in Chinese medicine, "have a fishy smell and a hot taste. They store the energy and are the seat of sorrow. The lungs produce the skin and the hair, form the kidneys, and control the heart. They have the nose as their opening, convert the fluids into nasal secretions, supply the skin, and nourish the fine hair. The lungs are attached to the third vertebra and hang down in eight lobes. They are gray in color and are pierced by eighty small holes."

Whatever may be the fallacies of these statements, many an American industrialist and many a worker willingly will accept the Chinese doctrine that "lungs are the seat of sorrow."

Every work-day in this country approximately 500,000 employees go about their duties exposed to silica dust in harmful quantities. This number is distributed over at least sixty different occupations, including, among others, foundry workers, core makers, granite cutters, rock drillers, sand pulverizers, sand blasters, and vitreous enamellers. In addition, at least 2,000,000 other workers are employed in dusty trades in which no silica exists or wherein the quantity of silica is below that capable of producing that form of pneumoconiosis

known as silicosis. These workers may be found in coal mines, limestone quarries, carbon black factories, glass plants, iron mines, coke ovens, gypsum mines, seed and grain mills, pigment factories, zinc smelters, lead refineries, and on and on through scores of other work places. As one becomes familiar with the extent of dusty trades, it becomes amazing, not that there is so much dusty lung disease, but that so little arises.

All of the many scores of industrial dusts entering the lungs in harmful quantities may be divided into four classes for the purposes of this present discussion:

*Read before the Section on Radiology, Michigan State Medical Society, Detroit, September 24, 1936.

1. Dusts that enter the body by way of the lungs without producing their chief effects upon the lungs. By way of examples of this type may be cited lead, arsenic, mercury, and manganese.
2. Dusts which, after coming in contact with the respiratory tract, including the lungs, lead to allergic manifestations. Already this has been covered by Dr. Towey, and need not be discussed in any detail here. However, by way of casual examples, may be cited pyrethrum, leather, cotton, fur, and many dyes, of which paraphenylenediamine is the best known.
3. Dusts which enter the lungs and become the causative agents of immediate inflammatory reactions. This class embraces such agents as soda ash, lime, acid and alkali dusts, and obvious others, such as resins in dust form.
4. Dusts which, after entering the lungs, set up reactions that eventuate in the production of fibrosis,—the so-called fibro-genetic dusts.

For lack of time it is necessary to limit further discussion to this last-mentioned group. Also, for the same reason, only the briefest mention may be made of any aspect of the action of these dusts or the conditions in industry under which lung injury arises.

Of all the mineral dusts leading to lung injury, silica and asbestos only stand out as sources of direful lung disease characterized by extensive fibrosis. Associated with these dusts are the respective terms "silicosis" and "asbestosis." Both are forms of pneumoconiosis, which term, from its very derivation, is applicable to any degree of abnormality of the lungs produced by any dusts. However, many pneumoconioses are not associated with unusual quantities and distributions of fibrotic tissue.

Silicosis is a specific disease, widely defined as, "a disease due to breathing air containing silica (SiO_2), characterized anatomically by generalized fibrotic changes and the development of miliary nodulation in both lungs, and clinically by shortness of breath, decreased chest expansion, lessened capacity for work, absence of fever, increased susceptibility to tuberculosis (some or all of which symptoms may be present), and by characteristic x-ray findings." Man-

festly, error attends the use of such terminology as "coal dust silicosis," "lamp black silicosis," "lime dust silicosis," etc. When silicosis appears in the coal miner, which is fairly common, it must be attributed to the silica content of the overburden of the coal seams. While this is true, the coal dust itself plays an important rôle in accelerating the appearance of the silicosis. Anthracosilicosis is a characteristic occupational disease of anthracite coal miners. Similarly, when silicosis appears in a cement worker, it must be attributed to the silica content of the ingredients entering into cement. While this is true, it is granted that cement workers may present increased quantities of fibrosis, quite apart from the typical features of silicosis and attributable to dusts other than SiO_2 .

Mineral dusts other than the two mentioned are of comparative insignificance as sources of disabling industrial lung disease. If the damaging properties of silica dusts be arbitrarily rated at 100, then, with the exception of asbestos, most other dusts may be represented on this same scale by 5 or 10. Among these 5 per cent or 10 per cent dusts may be found aluminum, lamp black, asphaltum, whiting, titanium oxides, gypsum, coke, and coal. On the other hand, some silicates, as exemplified chiefly by clays, may be rated somewhat higher and perhaps in the order of 15 per cent to 20 per cent, possibly because of the content of free silica admixed with the silicates, and possibly from actions within their own rights. Possibly, glass dust should be placed in this category rather than elsewhere.

From this concept that most dusts are only about 5 per cent as dangerous under industrial conditions as is quartz silica, it becomes advisable to abandon such outmoded terms as siderosis, aluminosis, chalcosis, byssinosis, anthracosis, as descriptive terms of significant pneumoconiotic disease.

Asbestosis as one of two outstanding industrial fibrogenetic lung diseases must here be dismissed with the cursory statement that its clinical course, its x-ray manifestations, and its association with tuberculosis are all quite dissimilar to those characteristic of silicosis.

The period of exposure requisite to the production of a demonstrable silicosis varies from a few months, such as two or three, to a lifetime of seventy years. Rarely, when the exposure is to essentially pure

quartz silica, in minute particle size range, an acute silicosis may be brought about which is atypical as to its clinical course, and particularly as to its appearance on the roentgen film. Such were some of the cases in the West Virginia holocaust; such also characterized some of the cases in the New Jersey outbreak occurring five or six years ago. In the causation of the more nearly typical form of silicosis, the period of exposure is likely to lie between seven and twenty-five years. The time element is greatly influenced by the percentage of free silica in any dust, the size of the particles inhaled, the hours of labor, the arduousness of the task, the age at which the worker entered the trade, the size and shape of the upper respiratory tract, particularly in respect to the vibrissæ, and, to a slight extent, by the race. Every one of these points might be made the basis of extended discussion. However, only one statement may be made with reference to each.

Some other minerals associated with the silica dust appear to retard the rate at which silica exerts its action, among others, iron oxides, gypsum, some clays, and possibly alkalis, although the last is disputed.

The size of harmful quartz particles is believed regularly to lie below 10 microns, and probably below 5. Obviously, the size must be such as to pass through the smallest entryway into the lung sacs. Also, the size must be such as to permit phagocytosis, although this last statement may be open to question.

Long hours of labor, particularly when associated with hard physical tasks, may increase both the depth and rate of breathing and remarkably increase the amount of dust entering the lung. Due to fatigue, the last hour of any work day may at times lead to the inhalation of as much dust as all the preceding hours during that period of work.

The probability of acquiring silicosis increases inversely with the age at which work was begun in any dusty trade. It follows that a youth beginning employment at sixteen is far more likely to acquire silicosis, other things being equal, than a workman who enters the same industry at forty. This statement is so true that if all of us were to live a lifetime of 150 years or thereabouts, probably most of us would acquire silicosis from ordinary exposures — from streets, schools, homes, farms, dust storms, et cetera.

Sex appears to play no part in susceptibility, although silicosis in the female is rare because of failure to enter the dusty trades. The negro is perhaps *more* susceptible than other races, while the northern European is by some regarded as *less* susceptible than other racial types. This also is disputed.

Of more importance possibly than any other factor except exposure to silica dust itself is previous exposure to less harmful dust. When a workman in a silica-using industry earlier has been employed as a coal miner, glass worker, gypsum worker, or as a worker in almost any other dusty trade, he appears prone to acquire silicosis in a shorter time and under conditions of less exposure than is true for a man without such history. This is not in conflict with the prior note that the simultaneous breathing of mixed dust apparently tends to retard the action of silica under some circumstances.

The very interesting chain of events following the arrival of silica in the lung sacs is a matter for special presentation by those who follow in this symposium, particularly the pathologist and roentgenologist.

At the outset of a limited discussion of the clinical manifestations of silicosis, it should be emphasized that much less reliance is to be placed on such features than upon work history, x-ray examinations and autopsy. Well-established typical silicosis as demonstrated by the x-ray may be found in a workman without any complaint of discomfort and who, from physical examination, presents only meager evidences of abnormality. On the other hand, symptomatology and clinical examination may be of great worth in differentiating between simple silicosis and silicosis complicated by other affections, usually tuberculosis or other infections. The cardinal symptom of silicosis is shortness of breath. The cardinal sign is diminished chest expansion. In the early stages of this disease the silicotic tends to put on weight, which possibly is due to self-limitation of work exertion. Should he fail to put on weight, secondary infections should be suspected. The demonstration of silica in the urine on a qualitative basis is of no value. All persons present silica in the urine from the ingestion of this substance in food. Quantitative determinations may be of some worth.

Pain in the chest or history that pain

has been present is common. Pain when present is more often localized in the mid-portion of the anterior chest, but may be anywhere. In those patients suffering from dyspnea, dizziness may be encountered. When marked fatigue or weakness is described by the silicotic, at once suspicion should be developed that secondary infection is present. Occasionally fatigue may arise from profound dyspnea and may not be present when dyspnea is not marked. Night sweats point to infection, as does also elevated temperature, which significantly is absent in simple silicosis. When sleeplessness arises it is usually associated with unfavorable progress. Sleeplessness may be associated with coughing, but, on the other hand, coughing is not of universal occurrence in silicosis.

On physical examination the respiratory rate is likely to be noted as increased, but not markedly so. The chest appears to be fixed and on palpation is lacking in resonance and elasticity. The information obtained through auscultation, percussion, and other determinations usually fails to provide any true concept of the pulmonary condition. In part this is due to the uniformity of change throughout the lungs, and, in part, possibly is due to a periphery of emphysematous tissue, which tends to mask evidences of deeper-seated conditions. The possibilities for confusion are but emphasized by the observation that a marked degree of simple silicosis may evince practically no evidences of deviation from the normal, while in the very early stages some cases may present rather marked departures.

Silicosis is prone to be associated with tuberculosis, and, in the absence of tuberculosis or other infection, silicosis readily demonstrated by the x-ray may be quite free from disabling capacity. Silicosis may activate antecedent tuberculosis, giving rise to the term tuberculo-silicosis, or may be followed by tuberculosis, leading to common usage of the term silico-tuberculosis. It has been observed that silicosis associated with tuberculosis is of low infectivity, and that the families of silicotics may not show a higher frequency of this disease than those of workers in non-dusty trades. However, this matter might well be the objective of further investigation.

Thus far in our discussion we have considered silicosis as a precise entity likely to

present the same features in victims for all trades where exposure may be provided. This is not exactly true. For some unknown reason, the silicosis appearing in different trades is slightly different, particularly in its capacity to produce disablement. The foundry-worker at 45, with a moderate degree of silicosis, probably may finish out his work span without his silicosis reaching a disabling stage. This is less likely to be true of the gold-miner in Canada or the sand-quarrier or the sand-blasters. In general, however, it must be recognized that silicosis, once inaugurated, tends to progress, and practically never recedes. The differences mentioned as characteristic of certain trades are largely ones of rate of progress.

Years after the cessation of exposure, silicosis may put in its first recognizable appearance. An interval of seven years is not remarkable.

The average case of well-established silicosis, such as represented by the onset of disability, rarely lives more than five or seven years, and in the great majority of instances death may be attributed to tuberculosis. Cardiac involvement is not prominent as a direct result of silicosis, but pneumonia superimposed on silicosis is of common occurrence.

Medicine is confronted with unusual difficulties in establishing the degree of disability in silicotics. Accordingly, difficult problems center about the management of the silicotic as a worker. A moderate degree of silicosis is no bar to continued employment, provided further exposure is eliminated. However, in every instance, the victim of simple silicosis is a potential victim of tuberculosis. Upon the advent of tuberculosis naturally the medical management is closely related to that of tuberculosis unassociated with silicosis.

Mindful of manifest shortcomings of a discussion of silicosis so limited as this has been, an attempt at amends is made by directing the attention of those who may be interested to two recent publications. First, a book entitled "Industrial Dusts," by Drinker and Hatch, published by the McGraw Hill Book Company during the past few weeks; and, second, a smaller book entitled "A Second Symposium on Silicosis," growing out of an institute conducted in 1935 at the Trudeau School of Tuberculosis at Saranac Lake.

DYSTOPIC MALDEVELOPMENT OF GENITO-URINARY SYSTEM

Case Report

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Developmental anomalies are prone to excite at least an academic interest and, if actually uncommon, are often worthy of being reported. When, however, an instance of maldevelopment excites a train of symptoms that create a minor problem in differential diagnosis and, further, are urgent enough to demand prompt surgical intervention, the problem has assumed a very definitely practical aspect.

The identity of the following case, an example of dystopy of ovaries and kidney, was not immediately clear, particularly in view of the intervention of torsion of the right ectopic tube and ovary which initiated symptoms that were not a little suggestive of strangulated hernia and were, in fact, interpreted in this light by referring physicians.

Report of Case

A female child, age eleven, admitted March 3, 1936, complained of pain in the left lower abdomen with concomitant constipation, nausea and vomiting. According to her mother the patient first became aware of pains in the abdomen four months prior to the date of admission (November 19, 1935). At that time she described distress in both lower quadrants and incidentally mentioned the presence of a "lump" in each inguinal region. Interestingly enough, neither child nor parent had been cognizant of any previous discomfort or discrepancy of contour. This original episode of pain of moderate intensity receded to the vanishing point within twenty-four hours, and the girl was without complaint until two weeks previous to her hospitalization, when the symptoms reappeared in a more severe and persistent form. Anorexia and relentless nausea intervened, and food was consistently refused. Despite the abstinence from nourishment, occasional vomiting was experienced, and marked, though not absolute, constipation existed during this period. Incidentally, in the opinion of the mother, the "lumps" increased definitely in size and were, at the time of admission, larger than ever before. No symptoms pertaining to pathology of the central nervous system, respiratory or urinary tracts were obtainable.

The birth weight of the patient was seven and one-half pounds—the delivery spontaneous and without incident, and the infant considered healthy and entirely normal. No serious previous illness had occurred, although she had been subject to mild constipation, as well as frequent attacks of sore throat and some of the contagious childhood diseases—namely, measles, mumps, and chicken-pox. She was the youngest of four children, having two older brothers and one sister, all alive and well, and, to the best of the mother's knowledge, without any developmental defect. The ancestral history was irrelevant. The patient was seen by several physicians and eventually by Dr. R. G. Tuck, whose interest awarded us the privilege of studying this case.

Examination.—Inspection revealed a well nourished white female child, who, though not acutely ill, was apparently in considerable pain. Her appearance and physical development coincided in general with that of the average vigorous girl of

eleven years. Proceeding with the examination from the head downward, one observed nothing of significance above the diaphragm, with the exception of evidence of early mammary gland development.

The abdomen was somewhat distended and tympanitic but exhibited no areas of rigor or muscle spasm. Peristalsis was not evident at inspection, while the stethoscope revealed a somewhat diminished intestinal motility. Neither liver nor spleen was palpable.

In either groin a definite mass could be visualized, each of which encroached upon and distended its respective labium majus (Fig. 1). That on the right was ovoid, apparently measuring 6x7 cms., and presented a somewhat cystic character to palpation, which, incidentally, elicited acute pain. The mass in the left groin was smaller, perhaps attaining a diameter of 3 cms., definitely firmer than its counterpart on the right, and, though sensitive to manipulation, by no means exquisitely tender. Sudden increase of intra-abdominal pressure by coughing transmitted a definite impulse to each mass, neither of which, however, revealed added bulging at such times. Gentle attempts to reduce the swellings into the abdomen were entirely without avail.

The external genitalia were essentially those of a normal prepubescent female, and examination was not at this time conducted beyond the intact hymen.

On admission, the levels of temperature, pulse, and respiration were normal, and laboratory investigation revealed no discrepancy of urine, red blood cells, white blood cells, or hemoglobin.

Treatment and Progress.—In view of the findings above, we were of course aware that this was not ordinary bilateral hernia. Migration of gonads, probably ovaries, was seriously considered, with the idea of circulatory embarrassment being advanced to explain the severe pain and tenderness existing in the mass on the right. Incidentally and obviously it was this distress and the possible consequences thereof that necessitated prompt surgical intervention.

Under ether anesthesia an incision about 12 cms., in length parallel to and about 3 cms. above Poupart's ligament was made, and the anatomical structure and content of the inguinal canal exposed in the manner customary for right inguinal hernia. Careful dissection demonstrated a definite hernial sac, which penetrated approximately

to the level of and lateral to the deep epigastric vessels. The usual layers could be demonstrated in this sac, including definite, if atrophic, cremasteric fibers. Associated

adjacent to, but entirely separate from, the mesial extension of the fallopian tube. No vestige of uterus could be found.

In contrast to the right side, palpation of-

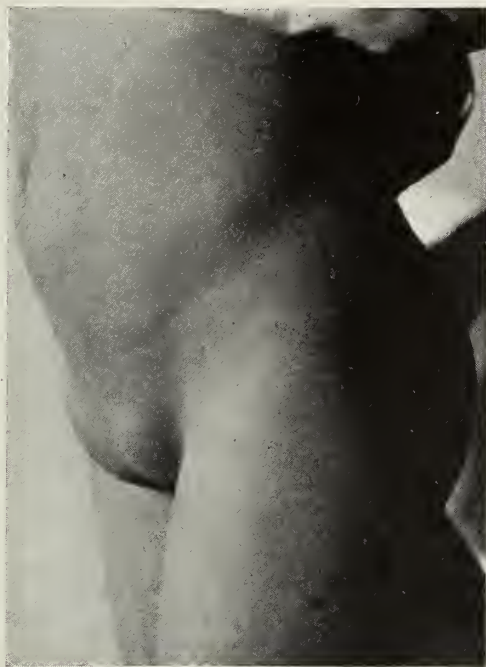


Fig. 1. Pre-operative appearance of patient.

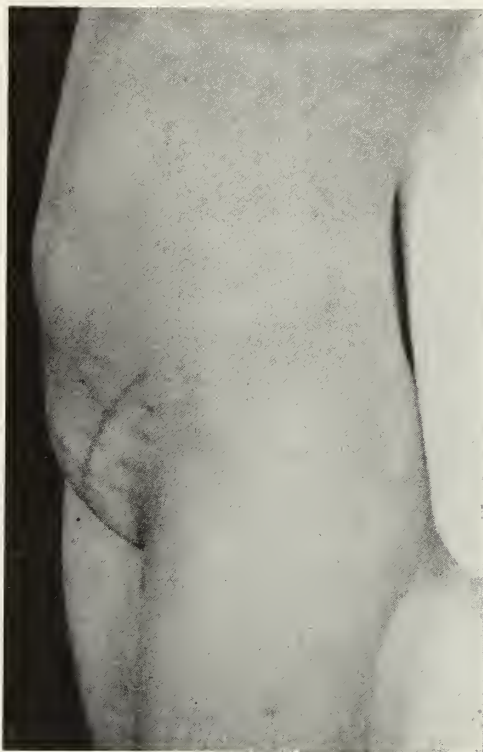


Fig. 2. Appearance on discharge from hospital.

with this sac and extending beyond the external ring was the mass, which could be readily identified as an edematous ovary, measuring about 5x3 cms. This was attached to a rather normal appearing Fallopian tube, which could be traced upward and lost at the internal ring. The distal portion of this tube was likewise edematous and was accompanied by markedly engorged blood vessels.

The sac was opened to the internal ring, following which the incision, including the peritoneum, was enlarged upward, thus facilitating exposure and inspection of the entire pelvis. It was now possible to trace the right fallopian tube inward, where it ended in a fibrous cord near the base of the urinary bladder. As this fibrous cord emerged from the internal ring to form the above described fallopian tube, one observed very definite torsion, apparently amounting to 1½ revolutions, and providing ample explanation for the pain and swelling of the structures distal to this point.

The vagina was now demonstrated to be quite well developed, though deviated somewhat to the right, where it ended blindly,

the left portion of the pelvis failed to reveal evidence of any intra-abdominal portion of round ligament, fallopian tube or ovary. However, on the left lateral pelvic wall, in a position corresponding in the normal subject to the lowermost portion of the mesometrium, there was found an ovoid, retroperitoneal mass, of firm consistency and dark red color, measuring about 2.5x4 cms. In order to ascertain the identity of this structure, the peritoneum was incised, and a small biopsy specimen secured, following which procedure the continuity of the peritoneum was re-established.

As the next step, the right tube and ovary were relieved of torsion, replaced in the abdomen, and sutured to the lateral pelvic peritoneum. The incision was then closed, obliterating the hernial sac, and approximating the various layers in the manner customary for inguinal herniorrhaphy.

A similar, though shorter, incision was now made overlying the left inguinal canal, and the contents exposed. The smaller mass

on this side was found to consist of ovary-like tissue, measuring about 2.5 cms., attached to which was a rudimentary fallopian tube extending upward, but, unlike that on the



Fig. 3. Excretory urogram. The rudimentary left kidney in the bony pelvis and the distention of the right ureter and renal pelvis are well shown.

right, becoming completely lost at the internal ring. Due to speculation as to the possibility of male germ plasm co-existing in this mass, and to the fact that the right ovary had been preserved, it was decided to excise the left gonad and tubal rudiments for histologic study. Subsequent to this the sac was amputated and closed, and the hernial defect repaired.

The postoperative course was punctuated by a rather stormy period of respiratory involvement, which, however, subsided by the fifth day and was followed by a smooth convalescence, leading to discharge from the hospital on April 4, 1936 (Fig. 2).

Report of Microscopic Study.—Concerning the mass of tissues from the left inguinal region, the following report was submitted by Dr. Carl V. Weller: "(1) Ovary of normal size (for age of patient) with small follicular cysts. (2) Fallopian tube with dilated lumen. (3) Oval mass made up of smooth muscle and connective tissue of the general structure of round ligament. A narrow strip of connective tissue included a few coarse voluntary muscle fibers having the appearance of the cremasteric muscle of the male." Of the tissue removed from the retro-peritoneal mass in the left

lateral peritoneal wall, Dr. Weller reports: "Kidney cortex. This mass is evidently misplaced kidney."

Report of Postoperative Cystoscopy and X-Ray Study.—Previous to discharge, the patient was subjected to cystoscopy and ureteral catheterization, and subsequently to excretory urography. The former procedure revealed a healthy, well developed bladder with normal ureteral orifices. The right ureter readily allowed the passage of a No. 5 ureteral catheter into the kidney pelvis, from which negative urine was obtained. However, on the left, it was impossible to invade the ureter for more than one-half inch with any ureteral catheter or sound, which, of course, led to the conclusion that atresia or aplasia of the short left ureter had occurred. Excretory urographic study further verified the identity of the aberrant pelvic kidney tissue, and also demonstrated a well marked distention of the right ureter and kidney, which, considered in regard to the controversy concerning the etiology of dilatation of the urinary excretory structures, is of more than transient interest (Fig. 3). This, however, is hardly the place to delve into any such absorbing and complicated study.

Comment

In consideration of a case of this nature, it would seem logical to refresh our memory of the embryology of the urogenital system, but in the interest of brevity no extensive recapitulation will be attempted. Rather will we touch lightly on a few interesting features in their general relationship to fetal development, suggesting to the reader a more exhaustive perusal of any of the excellent treatises on human embryology. This case is in no sense one of either true or pseudo-hermaphroditism — that is, there is neither a co-existence of male and female sex glands (true hermaphroditism) nor other ancillary reproductive organs (pseudo-hermaphroditism). It was rather an example of deranged migration of normal germ plasm and subsidiary reproductive structures, accompanied by certain inevitable anatomical and physiologic defects. The presence of cremasteric fibers might superficially be construed as evidence of bisexuality, but on analysis it becomes clear that any structure, emerging from its intra-abdominal location and penetrating through the inguinal canal, must be accompanied by remnants of the tissues that are met by the vagrant organs, and that are simply vestments of the hernial protrusion.

Aplasia of the ovary is an extremely rare condition, and probably occurs only in non-viable monsters.² Improper descent may occur as incomplete penetration of the ovary into the pelvis, which predicates the existence of ovarian tissue above the brim of the true pelvis, a multiplicity of variations of which may be encountered, or, as in the case above considered, displacement of the ovary

into an entirely abnormal position. Displacement is said to arise from failure of the gubernaculum of the ovary to fuse with the uterus, or to incomplete fusion of Müller's ducts, with the consequence that the ovary descends through the inguinal canal into the respective labium majus.³ The failure of fusion of Müllerian ducts not only may allow the ovary to migrate, but necessarily results in complete inhibition of development of the uterus. (As in this case, the phrase "absence of uterus" may be only anatomically correct, as its primordia are literally present as the Müllerian ducts, which are represented by the completely separated fallopian tubes, ending blindly in the peritoneum behind the bladder.⁴)

The presence of a well formed vagina in the subject above considered is of no little interest, due to the prevailing opinion, voiced particularly by Felix,¹ that the vagina develops wholly from the Müllerian ducts. Such a theory would appear untenable in

explanation of this case, which strongly supports the idea expressed by other embryologists, that the vagina arises in part from the external genitalia.

In view of the fact that the kidney (metanephros) develops in closest relationship with the Müllerian ducts and the indifferent sex gland in the urogenital fold, it is not, in this instance, surprising that we should find some abnormality of the urinary system. In the majority of reported cases of defect of the reproductive organs, concomitant urinary tract malformation has been discovered.

References

1. Felix, W.: The development of the urogenital organs. Man. In Human Embryology. Philadelphia and London: Keibel and Mall, 2:752-979, 1912.
2. Frank, R. T.: Malformations: In Gynecological and Obstetrical Pathology. New York: D. Appleton & Co., 1922, pp. 490-501.
3. Masson, J. C., and Rieniets, J. H.: Congenital malformation of the genital tract. In Obstetrics and Gynecology by Arthur H. Curtis. Philadelphia and London: W. B. Saunders Co., 1933, pp. 660-661.
4. Wharton, L. R.: Congenital defects. In Practice of Surgery by Dean Lewis. Hagerstown, Maryland: W. F. Prior Co., 10:18-19.

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FEVER THERAPY*

Adaptation of the Vapor Bath, Electric Light Bath, Use of Oxygen, Carbon Dioxide from Dry Ice

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Fever therapy dates back to antiquity. The induction of pyrexia has unquestionably been practiced, though unknowingly, for centuries chiefly through the use of the ever popular "sweat bath." While the older procedures in this category still command the respect of the profession, clear cut advances in physiology have of late inaugurated a greatly improved and bolder technic for the induction and control of fever as a therapeutic agent. The introduction of modern appliances, especially of the electromagnetic type, has called for an intensive scientific investigation of the therapeutic properties of heat. This, more than new apparatus, is responsible for the surprisingly greater efficacy now obtainable through the intelligent application of heat, by either old or new methods of fever therapy.

There is perhaps no other condition indispensable to the welfare and the life of the organism, which is more efficiently and jealously guarded than the constancy of the body temperature. This is effected by the extensively distributed mechanism of heat production and heat elimination. All the major functions of the body including respiration, circulation, digestion, elimination, etc., are subject to the instant command of a great variety of nerve impulses bearing

chiefly upon the thermogenic and the vasomotor centers. The slightest change in the surroundings of the body which may influence these mechanisms, tends to disturb the thermostatic equilibrium of any part or of the whole body. In response, all the functions of the body are modified spontaneously or reflexly, in a degree adapted to the occasion. It is no exaggeration to state that anything which tends seriously to upset the thermostatic equilibrium of the body threatens life itself. At any signal of danger, the activities of the defensive mechanism of the body are spontaneously stimulated, for the instinct of body and mind is self preservation.

It is relatively difficult under ordinary

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conditions to so tax the mechanism of heat regulation that it will fail to maintain the body temperature within a plus or minus range of one degree above or below the accepted average of 98.6° F. Even then, marked changes may occur in the rate of the heart, respiration, oxygen absorption, carbon dioxide elimination, digestion, perspiration, glandular activity, and other metabolic processes, before the body temperature is affected.

When, for any reason, the temperature can no longer be held within the normal range, there occurs a systemic disturbance, the intensity of which is proportional to the rise of body temperature. It has been determined that for each degree F. of temperature rise above the normal there occurs an increase of 8 per cent or more in the total body metabolism. Therefore, a metabolic rate of plus fifty or over is to be expected during hyperpyrexia, when the body temperature is elevated to 105° F. or more. In addition to the clinical symptoms mentioned, marked changes in the blood are noted, the most significant of which are an increase in the leukocyte count and a marked increase in the oxygen content of the venous blood in particular.

The fact which the writer wishes to emphasize is that symptoms observed in pyrexia are the evidence of coördinated and intense defensive activities for the protection of the body. This is the proof that fever is primarily a protective phenomenon which, when intelligently used, has far-reaching therapeutic effects.

Until recent years, fever, no matter how induced, was feared and shunned. Febrifuges and antipyretic measures of all sorts were in great demand because fever was considered pernicious in disease. Today, the physician first looks for the probable cause of fever and attempts to remove it while he needs merely to control the body temperature when it is excessive. It is now frequently considered good practice to ignore fever and even to induce it for therapeutic purposes.

A number of old time remedies and practices are the result of the accumulated experience during many generations, and not of ignorance or superstition, as we may be prone to believe. The very old method of "breaking up a cold" by a sweat pack, hot tub or foot bath, illustrates the point. The wisdom of these practices is today fully con-

firmed by advanced knowledge in thermotherapy.

Today, bacteriologists, serologists, physicists, chemists, pharmacists, and specialists in physical therapy, vie with each other in devising or perfecting artificial and biologic methods of raising the temperature of the body for therapeutic purposes. The recent discoveries contributed by the electrical engineers have, more than any other, aroused the interest of the public as well as of the profession in fever therapy.

So spectacular indeed have been the results obtained from a variety of modern ways and means of inducing pyrexia that under the heat of interest promoted, the imagination and hopes of clinicians and manufacturers has now actually reached the stage of delirium. This will persist until the cold hard facts of experience have overcome the present period of excitement and established the therapeutic value and advantages of the agencies introduced in late years in this field.

Although it is not to be questioned that the modern electro-thermotherapeutic measures present distinct advantages, disinterested comparative tests have not shown that general pyrexia can be induced more pleasantly, more rapidly, more safely, or with better results by means of the high frequency current, the short and ultra-short waves, or by electro-magnetic inductors or condensers, than can be done by the use of older procedures.

Thermotherapy has from antiquity included the use of light, air, water, and vapor. It is only within recent years that electrical energy has also been made applicable, with both success and safety for thermotherapeutic purposes. The hopes of securing some specific effects, other than those that may be derived from the heating which such appliances have induced in a spectacular manner, have not so far been substantiated. Meanwhile, we do well not to be in haste to discard measures which have stood the test of time and have proved to be of considerable therapeutic value.

Objectives and Limitations

Artificial pyrexia of a moderate intensity, 103° to 105° F., is a safe procedure in properly selected cases.

Hyperpyrexia may be arbitrarily defined as a state of high fever with a body temperature of 105° F. (41.5° C.) and over.

It should be used with even greater caution than pyrexia, and administered under the supervision of the doctor assisted by a properly trained and experienced technologist.

Whether hyperpyrexia is ever justified, except in cases with a specific infectious etiology, still remains to be established. The heroic procedure which it entails presents elements of risk. It should therefore be confined to conditions known to be due to a specific organism, or perhaps a virus, which can be destroyed in situ at a temperature safely tolerated by the body.

The success with which hyperpyrexia can eradicate from the body certain specific micro-organisms such as the diplococcus of Neisser and the spirochaeta pallida depends on: (a) the temperature to which the infected tissues can be raised with safety; (b) the increase of the bactericidal power which heat promotes in the blood and tissues; (c) the intensity to which the defensive mechanism of the body can be advantageously and safely stimulated. It may readily be admitted that the last is the main objective to strive for in the use of fever therapy whether or not actual bactericidal effects are also obtainable.

The cardinal points which are now apropos and which the writer wishes to emphasize are the following:

1. Heat is the ideal and the specific biologic stimulant of body functions. As a therapeutic agent, it has no equal.

2. Barring contraindications, artificial pyrexia is a safe, though powerful, therapeutic agent when intelligently induced. High fever becomes dangerous particularly when any part of the heat regulating mechanisms of the body is overburdened, exhausted or disorganized.

3. The maximum therapeutic dose of fever is that which brings about a maximum stimulation of the defensive activities of the body and of the bactericidal properties of the blood and tissues. It is doubtful whether body temperatures over 103° to 105° F. are ever necessary to secure these maximum desiderata, except when attempting to destroy certain infective micro-organisms or viruses.

4. Hyperpyrexia, especially when prolonged, though at first temporarily excitant, will, as a direct consequence, rapidly induce extreme depression and exhaustion. It may, as a result, become so detrimental as to

ultimately defeat its chief therapeutic purpose. The more intense the excitant effect, the greater will be the subsequent depression. Serious exhaustion may occur after a series of too severe, too prolonged or too frequently repeated treatments.

5. Time only will prove whether artificial fever therapy as generally conducted today is adding to its credit a greater number of cures in arthritic as well as in a number of other conditions, than have been obtained during the past fifty years by more conservative physical and other therapeutic measures.

The advent of electrothermotherapeutics has been so spectacular that it has awakened an unprecedented interest in the study and the use of heat. As a result, we not only possess a more efficient variety of agents but we have become far more intelligent, more competent and bolder in the therapeutic use of heat.

The new fever-inducing agents, which include the use of the short or ultra short wave, are the contributions of a class of investigators of high scientific attainment in the field of electricity. Their discoveries were quite accidental and so radically different from the methods in common use that, as a matter of course, their relative value and safety were to be established before they could be endorsed.

High hopes were entertained, at one time, that some inherent curative properties of the short wave might revolutionize the treatment of a number of disorders which heretofore had proven intractable to the old-fashioned applications of heat by conduction and radiation. Not only the new but the old also have since been submitted to a comparative study with a thoroughness and enthusiasm seldom, if ever, previously exhibited in the realms of physical therapeutics. It is indeed probable that its influence will spread and become the predominant stimulus which will establish a new era in physical therapy as a whole. At any rate, a constructive agitation of this order was greatly needed to keep physical therapy out of the constantly forming ruts which empirical beliefs are ever ready to cut in its pathway.

That the short wave and diathermy often present advantages over conductive or even radiant heat for deep and localized hyperthermia is admitted. Intensive local hyperthermia for bactericidal attempts in deeper

regions has its limitations from the standpoint of the maximum tolerance to heat of the living tissues. Contrary to the claims that vesical, vaginal or rectal irrigations at as high a temperature as 130° F. may raise the adjacent tissues to nearly the same level, actual thermometry discloses that such tissue temperatures are, quite fortunately, far from being approached by these procedures, especially when the circulatory activity of the parts is not materially impeded. Deep tissue temperatures of 110° to 112° F. have been obtained "double header fashion," by the local application of the short-wave or diathermy to subjects previously brought by other suitable means to a state of moderate general pyrexia. A temperature of 113° F. is believed to be the maximum point of tolerance in deeper tissues or organs. For this purpose, the use of electromagnetic induction currents in conjunction with a properly air-conditioned cabinet is probably ideal. Its chief advantage is a relative freedom of movement in a cabinet, the temperature of which need be only a few degrees above body temperature, less than 110° F.

As matters stand at this time, *the greater therapeutic successes which are generally believed to have been gained in late years as the result of fever therapy, whether through the use of merely modernized methods or by any of the latest inventions, should be attributed above all to improved technic in the use of heat.* But the technic perfected during the intensive study to which the newer methods and apparatus have been submitted, can now be profitably adapted to the use of any older procedures.

The Adaptability of the Incandescent Electric Light Bath, the Vapor "Russian" Bath, and Other Common Procedures for Fever Induction

Fever therapy is expensive because it demands a considerable amount of close attention from a physician and the undivided services, for hours at a time, of an experienced nurse or technician with a training above the average in physical therapy. If, in addition, new and unusually expensive equipment is called for, the advantages of this indispensable form of therapy will never be within the reach of any but the rich and the indigent cared for by tax revenues. It must be realized besides that a single equipment will take care of only one patient at a time and usually not more than

two each day. The needs are so great, and the means of many hospitals and other institutions for the sick are often so restricted, that the financial burden should be alleviated as much as possible.

There is to be found in many institutions a variety of facilities which with relatively little trouble and expense can be adapted for this purpose and which will prove efficient if intelligently utilized. Fundamentally, all that is necessary is to convey heat to the body, to stimulate its heat-producing mechanism, while at the same time adequately protecting the skin against the loss of the accumulating heat. The amount of heat necessary to induce fever is relatively small and the required temperature of the application need not be many degrees above that of the body. If the procedure is sufficiently moist to prevent evaporation on the skin or its surroundings, temperatures of 108° to 112° F. are ordinarily sufficient to raise the body temperature to 103° F. or higher in one hour's time. If desired, it is relatively easy further to raise the body temperature to higher levels.

General hyperpyrexia of any desirable intensity can be induced as rapidly and successfully by the older types of procedures as by the new. In fact, some of the most approved and efficient apparatus now in use for general hyperthermia do not in any manner depend upon the modern short wave or high frequency electrical apparatus but upon nothing else than heat applied in improved ways by means of the primitive hot air or vapor bath, or the ordinary electric light bath. These are readily modernized by being equipped with reliable thermometers or more pretentious thermo-regulating and recording devices.

The Incandescent Electric Light Bath.—

In a survey of the large variety of apparatus and appliances which for decades had accumulated in the physical therapy departments of the Battle Creek Sanitarium Clinic, several were found to be readily adaptable for fever therapy at little cost. Of all such appliances the Incandescent Electric Light Cabinet seemed to be the most promising for the purpose, chiefly because of the great penetrability of the radiant heat rays which it develops in great abundance.

This modern type of bath is the connecting link between the ancient and the ultra modern in the field of hyperthermia. It was

introduced by Kellogg forty-five years ago, at a time when a wave of enthusiasm in the medical profession had lifted hydrotherapy from an empirical to a scientific level.

The chief arguments presented in favor of the electric light bath centered first on the ease with which it could induce an abundance of perspiration in comparison with other types of heating procedures. It was also early observed that it induced an elevation of body temperature. This was not considered to be a fever of the ordinary type but an inoffensive "febrile state" which as stated nearly a half a century ago by Kellogg, the inventor, and the late Winternitz, exerted a strongly curative influence by quickening all the vital processes, promoting the production of antitoxins and stimulating in various ways the defensive mechanism of the body.

Nevertheless, a lingering sense of caution prevailed for many years and it was definitely urged that the electric light cabinet bath should be of short duration, not to exceed twenty minutes as a rule. Maximum therapeutic excitant effects were supposed to be reached in even less time than that, usually in eight to twelve minutes. The longer sances were to be prescribed only for eliminating or profuse sweating purposes. The determination, by the scales, of the amount of perspiration lost, rather than the elevation of the body temperature, served as proof of its therapeutic value. Fever was to be avoided or, if unavoidable, just tolerated. This perhaps explains why the fever thermometer was relatively little used in those days, even experimentally as well as during the administration of hot baths of various sorts for therapeutic purposes.

The writer has for the past two years made use of the electric light bath for inducing fever. The original horizontal type of cabinet (Fig. 1) proved to be very satisfactory for the purpose because the patient is treated, as is necessary, in the recumbent position. The cabinet is equipped with 86 60 W. carbon filament bulbs (74 in the space above the couch and 12 underneath). The carbon filament emits a greater amount of heat rays than does the tungsten. The lights are controlled in groups by means of five switches. This wattage is more than ample and provides a surplus for adequate and ready heat control. Danger of burns must be guarded against chiefly along the sides, the feet, and back,

especially where pressure may be an added factor to heat.

The best success was obtained when a thin flannel blanket was hung over a cloth-

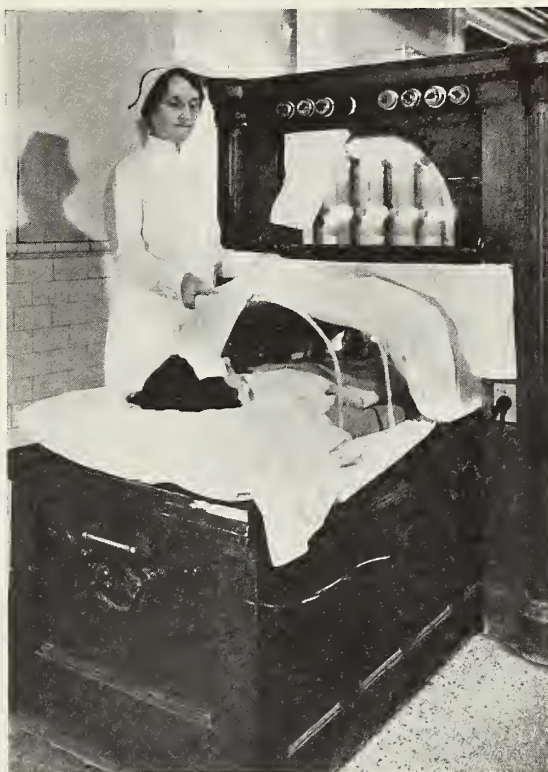


Fig. 1. Horizontal electric light cabinet used for hyperpyrexia, showing a light flannel blanket supported over the patient by a cloth wrapped wire frame. Curtain drawn to show light bulbs.

covered wire frame (Fig. 1) covering the entire body. This diffuses the radiant heat, prevents excessive heat in spots and filters out the more intense "burning rays." This protection together with an occasional change of position entirely prevents the occurrence of burns. It is also the best way to guard against any part of the body's accidental contact with any of the bulbs. The temperature of the cabinet is registered by a thermometer protected from the direct rays from the bulbs, and ranges from 130° to 160° F. Hyperpyrexia requires an average temperature of not less than 150° F. The patient appreciates above all the freedom of movement allowed in such a cabinet.

The relatively high temperature which this type of bath requires is due to the dryness of the air, which considerably increases the rate of evaporation of perspiration and its consequent body cooling effect. Some

simple air humidifying unit would undoubtedly reduce, by twenty to thirty degrees F., the range of temperature necessary to readily induce pyrexia.

made with the head inside the vapor room showed that no material advantage, as to fever inducing efficiency, could be recognized. Furthermore, as might be expected,



Fig. 2. Steam room "Russian bath," built thirty-four years ago, adapted in 1935 for fever therapy, by installing a counterweighted sliding panel and a shelf support for the head outside of the steam room.

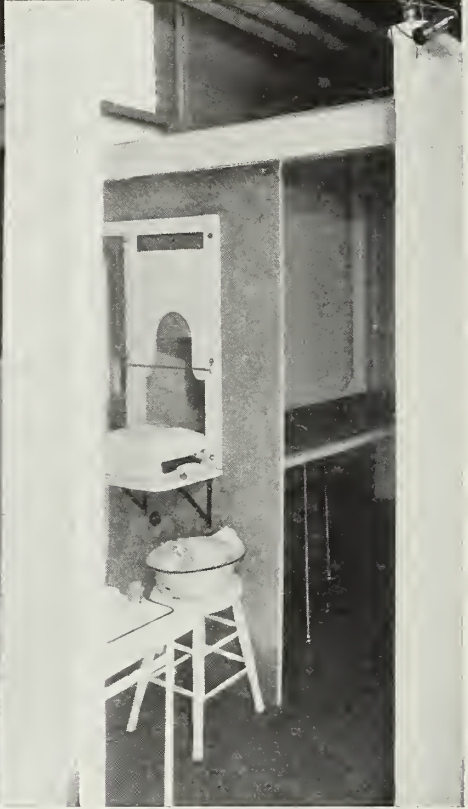


Fig. 3. Same as Figure 2. Swinging door open to show slab inside the steam room.

By way of suggestion, heating by means of electric "infra red" units might present certain advantages over the electric light bulb system, in case the construction of a new cabinet is contemplated.

The Vapor "Russian" Bath.—In a series of tests with all types of methods here mentioned, including the short and ultra-short wave apparatus, the writer made a study of the adaptability and efficiency of the vapor bath in hyperpyrexia. At the suggestion of the medical director, Dr. C. E. Stewart, and with the assistance of Drs. A. B. Olsen* and N. O. Byland, who supplied the clinical subjects for this investigation, a series of observations were first conducted using a 5x10 foot "Russian" or steam room built thirty-four years ago. Preliminary observations

the treatment is decidedly more unpleasant and trying, adding also considerably to the dangers of the ordeal in prolonged hyperthermia.

This small room is supplied with hot and cold running water, and steam which is delivered under a 2½x8 ft. slab, through a 2 or 3 ft. length of a ½ in. pipe with a few lateral perforations, the end being capped. The flow of steam is controlled by a needle valve, operated from outside the chamber and preferably not in sight of the patient.

A swing door of ample width makes it easy to assist or carry the patient in or out of the room. A thermometer hangs inside where it can easily be read through the glass in the door. The only alterations, necessary to make this steam room ideal for fever therapy, were cutting an opening through the partition for the head of the patient, in-

*Dr. Olsen has given to this type of bath and to its use in fever therapy the appropriate and descriptive names of *vapo*therm and *vapo*thermia, respectively.

stalling a small shelf for its support, and a counter-weighted sliding panel cut to fit loosely around the neck. A couple of turkish towels hung from a rod over the open-

en down, in a tumbler of cold water from which it is taken immediately before insertion and in which it is replaced the instant it is removed and read outside the

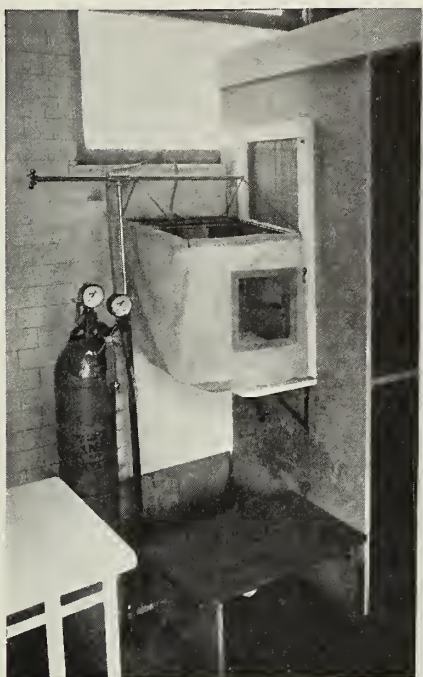


Fig. 4. Same as Figure 3. With the "open top" Burgess oxygen tent as adapted for oxygen and carbon dioxide feeding during fever therapy. The oxygen tent is readily transferred, if necessary, wherever the patient may be removed to continue the treatment. Requires no ventilating motor and no CO_2 absorption unit.

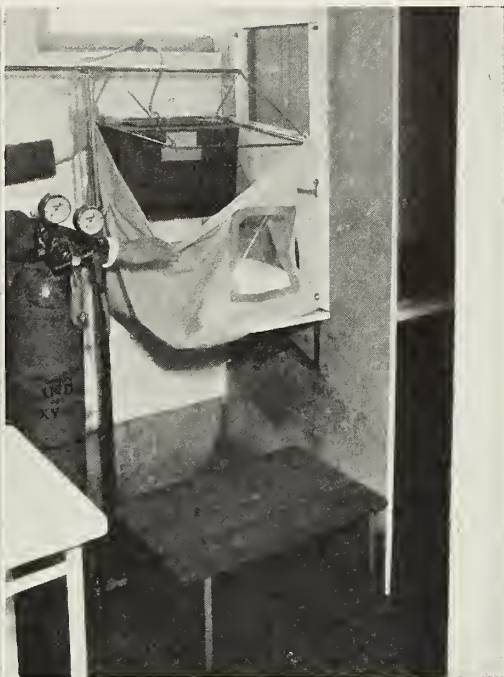


Fig. 5. The ice cooler. The oxygen is admitted at the top of the cooler, passes through the ice and into the tent. Carbon dioxide, if needed, is delivered from the dry ice in a fiber box, well wrapped in toweling and placed inside the tent underneath the cooler.

ing, and tucked about the neck as needed, completely prevent the escape of steam about the face during the treatment. (Figs. 2 and 3.)

Note also the window above the head for admitting fresh air from outdoors. An electric fan is of great assistance as a means of keeping the head cool and comfortable. One, or if necessary two, 2 in. thick sponge rubber mats on the slab, and an air pillow for the head provide a comfortable couch.

Needless to say that a constant watch of the patient's body temperature is of extreme importance. It is advisable, for safety, to secure this temperature during hyperthermia in two ways: by mouth or axilla, and also by rectum or vagina. It is necessary to take adequate precautions when a fever thermometer, which is of the "maximum" type, must momentarily come in contact with overheated air or body surfaces before or while it is being inserted, as is the case with the Vapotherm. All that is necessary is to have the thermometer, previously well shak-

steam room. If necessary, the overheated surfaces about the rectum or vagina can be cooled, especially before insertion, by means of a cold napkin held in place for a few seconds only.

Only a competent technician knows how to obtain and keep a record of the subject's temperature, which should be taken every fifteen minutes, or more often if necessary during the height of the fever. A considerable amount of money can be spent for various devices which not only indicate at any moment the axillary or the rectal temperature, but also that of the cabinet or of the enclosure in which the treatment is given. There are also more or less intricate thermo-regulators, indicators, and recorders working independently or interdependently of each other. When, for instance, some thermostatic device is set for the desired body temperature to be reached and maintained, the heat generating unit, whatever may be its type, is appropriately and automatically turned "on" or "off." These cost-

ly instruments, though desirable, are not indispensable, nor, as yet, absolutely reliable. Too much dependence should not be placed on them.

As a rule, the procedures which are the safest and most agreeable are those which permit the patient to move and change position, without fear of burns by contact with heat generators, electric light bulbs, or by poor contact with diathermy plates causing arcing.

Heat and pressure sores sometimes followed by necrosis, are best prevented by frequent change of position during treatment. In addition the assistant may enter the chamber at more or less frequent intervals and spend a minute or two in kneading, rather than rubbing, the limbs especially, and the trunk, front and back. This effectually relieves muscular spasms and alleviates general dysphoria. Careful deep kneading manipulations are of special value for reducing circulatory sluggishness and passive internal congestion, promoted by the prolonged heating of the skin and deeper tissue.

A rise of body temperature of four or five degrees F. is ordinarily obtained in the course of the first hour if the chamber is at a temperature of 108° to 110° F. to start with and gradually raised to 112° (rarely to 115°). This amounts to a rise of body temperature of one degree in each 15 minute period. Bath temperatures of 112° to 115° F. may, during the second hour, more than suffice to overstep the limits of safety. Speedier results are not obtainable with any other individual method, neither are they really necessary. Attention has been called in the first part of this paper to the use of the air-conditioned cabinet in conjunction with electro-induction or other short wave current. The vapor cabinet should lend itself nicely to such a combination.

Heat necrosis may result from long continued lying on the back in baths, cabinets, or packs though the temperature may be quite moderate, 110° F. or even lower. These injuries naturally occur more readily in the sacral and scapular region. They do not make their appearance as ordinary burns and blisters but as indurated welts of variable size which may necrose, especially if neglected. These are easily prevented during prolonged treatments. They should be given immediate attention and treated as you would a bed sore by protection against

mechanical injury, pressure, scratching, excessive rubbing, and, above all, protection against infection.

The Hot Tub Bath, the temperature of which is gradually raised from 100° to 106° F. or higher, will rapidly induce a fever of 105° F. or more. Comparative observations show that this procedure is the one which most rapidly tends to tax the tolerance of the patient. This is, most likely, chiefly due to the feeling of respiratory oppression caused by the hydrostatic pressure of the bath. Although it is best to avoid its use, if nothing better is available it should not be ignored for moderate pyrexia of relatively short duration. Because everywhere available, the hot tub bath is of value as a "starter" and when the patient's temperature has been suitably elevated in the tub, the stage of pyrexia can be continued by wrapping the subject in a hot blanket pack reinforced, if desired, by hot sandbags or the not altogether safe use of hot water bottles. Hot drinks help also.

The hot tub bath may at times be of service to merely introduce variety in a series of treatments which even with the most perfect and attractive devices become a tedious, trying and sometimes also a dreaded ordeal. A quite different, more pleasant and less taxing procedure interposed between more severe ones is to be preferred, at times, to a complete suspension of treatment.

The Bath-Tub Vapor Bath, as suggested by the late Dr. Winternitz of Vienna, can be readily transformed into a simple horizontal vapor cabinet by placing a board, freely perforated, raised three or four inches from the bottom of the tub on suitable supports. Through a piece of garden hose three or four feet long, attached to the hot water faucet, a small stream of very hot water is maintained and spreads over the bottom of the tub from the upper end towards the outlet, which is left unplugged. The water, if near the boiling point, liberates a sufficient amount of hot vapor to maintain the well covered tub enclosure at an adequate temperature for fever therapy purposes.

The Old Fashioned Blanket Pack as well as the electrically heated pack can also be made very efficient. The added advantage which this type of procedure presents as a means of restraint in mental cases should however not be abused. As complete a freedom of movement of both body and

limbs as allowable should be favored. To this end it is well to adopt some method of thoroughly wrapping each limb separately. This will add much to the comfort of the patient, reduce restlessness and prevent apprehension. Arm and leg boot-like slips pulled over the wrappings and safety-pinned at the shoulders and hips, serve nicely to hold things in place while allowing movements of the limbs.

The Mud and Sand Bath, the underlying primitive ideas conceived and exemplified in various ancient ways of sweating the body, could profitably be adapted in devising other simple and inexpensive methods of inducing fever. Even the hot mud bath as well as the hot sand bath should prove to be of practical application for this purpose, where such procedures are available under appropriate artificial or natural surroundings.

The Use of Salt, Oxygen, Carbon Dioxide, and Sedatives in Fever Therapy

Hyperpyrexia imposes a severe strain on many functions, and it is of the utmost importance, for safety, to make sure that the body machine is fit and adequately provisioned to speedily develop and expend a tremendous amount of nervous, glandular and other available energy.

During the stage of hyperpyrexia there occurs rapid consumption or loss of various substances which demand immediate adequate replacement. The most important are water, sodium, and in protracted pyrexia, oxygen, carbon dioxide, and sugar. The value of sugar to quickly and steadily replace the loss of energy, during various types of strenuous work, has long been appreciated. Likewise the replacement of water losses is imperative. The urgency also of replacing the mineral salts lost in excess by way of profuse perspiration has been recognized only in recent years. Deaths due to heat stroke have, for instance, been completely prevented during the construction of Boulder Dam as soon as the workmen, exposed to the tremendous heat in the canyon, were given a small amount of salt in their drinking water.

This same precaution in fever therapy totally averts most of the distressing symptoms which are sometimes observed in hyperpyrexia: muscular twitching, cramps, gastric distress, extreme depression, et cetera. These complications are now known to be largely due specifically to excessive per-

spiration and a consequent sodium deficiency in the blood and tissues.

Oxygen deficiency is always detrimental. It is imminently dangerous under conditions of stress. Sustained hyperpyrexia is the most severe strain which is ever imposed on the body for the definite purpose of arousing and maintaining, within limits of safety, an intense stimulation of all the processes involved in the defensive mechanisms of the organism. The oxidative processes may be more than doubled and a corresponding supply of oxygen must be steadily available. The urgency of maintaining this supply is far greater than that of sodium because there is no provision for the storage of oxygen for emergency use in the body.

While the importance of sodium should not be discounted, it is the opinion of the writer that anoxemia may often be responsible for several of the complications which have been ascribed to sodium deficiency. The symptoms in either case may be similar, but the following have for many years been included in the symptomatology of the anoxemia observed under conditions in which sodium deficiency could not be a concurrent factor: First, respiratory disturbances, excessive pulmonary ventilation with a resulting acapnia and alkalosis. Later, slowed and depressed breathing leading to acidosis due to accumulation of lactic acid and other products of metabolism, the removal of which is delayed on account of oxygen deficiency. Later on usually, passive congestion, cyanosis (which becomes marked when respiration, circulation, and blood pressure decrease), great restlessness, cramps, sensory and mental dullness, headache, drowsiness, muscular weakness, fatigue, gastro-intestinal disturbances, and periodic breathing. The after-effects may include muscular stiffness, peripheral neuritis, and, in severe cases, symptoms of nerve cell and cardiac degeneration. In some cases the anoxemia rapidly induces irreparable degenerative changes in nerve cells, which may soon prove fatal if oxygen feeding is too long delayed.

For several years it has been customary with us to give oxygen and carbon dioxide whenever symptoms of anoxemia and of respiratory deficiency are observed. It is recommended as a routine procedure in all cases of prolonged hyperpyrexia, not only when the fever is at its maximum but thereafter for one half hour or longer until all

the circulatory, respiratory, and other symptoms are quite normal again.

The oxygen tent has proved convenient for the purpose, though it may interfere with the free access to the patient when he needs the most attention. Sometimes, the patient objects to having the head confined in the tent but a little tactful persuasion usually wins coöperation.

The most satisfactory method of oxygen and carbon dioxide feeding in conjunction with fever therapy is by means of the "open top" or Burgess-Collins oxygen tent. Its chief advantages are: extreme simplicity, compactness, and adaptability. The open top allows free access to the head of the patient. No motor, no CO₂ absorber, just an "open top" oxygen tent. The latter is virtually an inverted hood for the head only. The air is cooled by means of an ice chamber placed in the tent at one end. The oxygen is supplied in the usual way from a cylinder, through a reducing valve and flow meter. In case of emergency get the oxygen from the cylinder in any way you can, even without a reducing valve (provided you know how to do it safely) though it may be wasteful of oxygen.

Figures 4 and 5 show the adaptation of the "open top" oxygen tent to the vapor cabinet and chamber. It is advisable to use oxygen freely at the start, for a few minutes (8 to 10 liters per minute, reducing to 5 or 6 liters or less, when cyanosis has disappeared). Economy of oxygen is less important, however, than assuring an ample supply for the patient, especially in view of the relatively short period of oxygen feeding needed.

Nasal feeding of oxygen into the oropharynx might be, by some, the method of choice.

An admixture of CO₂ with the oxygen is of great value for stimulating and normalizing both the pulmonary and tissue respiratory exchange. Stimulation of respiration by CO₂ must never be carried to excess in anoxemia, especially when signs of cardio-circulatory depression are present. To impose added burden on the heart in the presence of oxygen deficiency is always dangerous. This point cannot be over-emphasized.

Sedatives. — When pyrexia is induced mainly for the purpose of increasing the activities of the defensive mechanism of the body, sedatives are quite logically contra-

indicated and their use should be avoided. However, when hyperpyrexia is intended to destroy infective microorganisms in the blood or tissues, appropriate sedatives are usually indispensable for much the same reasons that justify their use in surgery. They should be used with caution because their effects on the behavior of the patient during treatment may lead to misinterpretation of symptoms which might otherwise serve as important danger signals.

The Use of Dry Ice as a Source of Carbon Dioxide for Therapeutic Purposes

The writer has, on various occasions for the past two years, resorted to "Dry Ice" as a source of CO₂. Its use in hyperpyrexia and for other purposes is extremely simple. Place ten ounces (300 gms.) of dry ice (broken into pieces the size of an egg) in a substantial fiber box. Cover, but do not seal hermetically. Wrap the box loosely in a piece of turkish or flannel cloth to avoid any possibility of direct contact with the skin or the rubber goods of the tent and place underneath the ice cooler. Carbon dioxide from 300 gms. (10 oz.) of dry ice will thus be steadily delivered at the gradually diminishing rate of approximately .75 L. per min. for the first hour, .62 L. for the second, and .50 L. for the third hour, according to the following table:

	Gms. per hr.	Gms. per min.	L. per min.
1st hr.	90	1.50	.75
2nd hr.	75	1.25	.62
3rd hr.	60	1.00	.50

Analyses have shown from 2 to 5 per cent CO₂ is maintained under average conditions of temperature in the tent during the first two or three hours with an initial supply of 300 gms. of dry ice.

The efficiency of this open top tent for administering oxygen or carbon dioxide is greatly lowered whenever the air, in or over the tent, is agitated by a fan or while reaching in to attend to the patient. Proper allowance must be made for such disturbances, unless avoidable. The character and the rate of breathing is the most practical guide for regulating the amount of dry ice necessary at any time and under varying circumstances. With the use of two or three dry ice boxes the amount of CO₂ can readily be modified to suit the immediate needs of the subject when respiration is to be stimulated in this manner.

Summary

The curative benefits derived from the use of heating or sweating procedures have been for centuries erroneously ascribed chiefly to the elimination of perspiration.

Advances in physiology now reveal that the outstanding therapeutic property of heat is due primarily to its highly stimulating effect on the "defensive mechanism of the body."

Good technic, based on up to date physiology adapted to the use of the vapor bath, the electric light bath or other equipment

already available in many institutions is unexcelled for pyreto therapeutic purposes.

Hyperpyrexia imposes a tremendous expenditure of energy on the organism and may at times demand the use of oxygen and carbon dioxide in addition to the prompt replacement of losses, particularly of water, salts and glycogen. The adaptability of the "open top" Burgess oxygen tent is illustrated.

Dry ice offers a very convenient and economical source of carbon dioxide when therapeutically indicated.

TRAUMA AS A FACTOR IN DEMENTIA PRECOX

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Although dementia precox is one of the earliest recognized psychoses, as well as the commonest in occurrence, it still presents many mysteries to the medical world. Whereas the appearance and subsequent course is commonly understood, confusion of divergent ideas concerning the etiology of this malady exists through the present time. Recent observations of some cases, which have been given little previous attention, tend to add to the complexities of the etiology. Trauma manifests one of these factors that must be recognized in the development of some cases of dementia precox.

Despite the fact that neurosis is a frequent concomitant of trauma, dementia precox, as well as all of the other psychoses, is uncommon. The following case presents the occurrence of trauma which acts as an important etiologic factor in the formation of dementia precox.

Case Report

E. P., white, male, age thirty years, a fireman by occupation.

Present illness.—The patient's medical records, as well as the history obtained from his wife and his fellow associates, state that the patient was in apparently perfect health up to the time of an accident on August 20, 1931, while performing his duties as a fireman. At that time, as a result of a collision between a street car and the fire truck he was riding on, the patient was severely injured. He was hurled from his position on the back end of the fire truck to the street. In the fall, he was rendered immediately unconscious as his head struck the pavement. While in this state, he was rushed to a local hospital, where he received first aid treatment. In addition to the bruises and cuts about the head, there was profuse bleeding from a third degree laceration of his upper lip, extending from the right lower end of the nose to the mid-section of the upper lip. This was repaired with four sutures. Roentgen rays were not taken of his skull at that time. He returned for treatment of his sutured lip, remaining off duty for five days during this time. No other medical treatments were rendered other than that for his wounded lip, which healed uneventfully. He was thereupon discharged from the hospital as cured. However, he complained continually of a persistent headache from the time of the accident.

Approximately one and a half years following the accident, in February, 1933, the patient's wife be-

gan to notice a sudden change in his personality. At that time he was showing signs of beginning fretfulness and nervousness. He began to read the Bible very ardently. He became jealous of his wife, whom he would slap, beat and threaten. At the fire station, he acquired articles which he claimed were his own personal property, such as a spade or shovel. He felt that everything belonged to himself. He became suspicious of people, believing they were persecuting him. Because of these sudden changes in his behavior, he was advised by superior officers to seek medical attention, which he refused to do voluntarily. However, after forced medical consultation, he was admitted on April 4, 1933, as a bed patient in Detroit Receiving Hospital, where he remained for approximately one month. Here the diagnosis of dementia precox was for the first time entertained. After a short stay of about two weeks at home, he was readmitted to the same hospital. He was then committed on July 24, 1933, to the Eloise Infirmary Hospital, at Eloise, Michigan. On entrance, because of the character of the head injury he sustained, roentgen rays of the skull were employed to rule out the possibility of a depressed fracture. These were reported to be negative.

Personal history.—The patient was born in the State of Pennsylvania on March 21, 1906. He completed his school education to the tenth grade. He first began to work at the age of sixteen. From that time on, he was steady in his employment, and well adjusted to his environment. He had been ambitious, energetic and sociable. He enjoyed mixed gatherings. Among other things, he was serious, thoughtful, unexcitable, truthful, obedient, and economical. He never drank heavily and smoked only moderately. There were no traces of venereal diseases in his history, nor any evidence of nervous breakdown or mental disease.

Family history.—His parents are both living and well, each at the age of fifty-eight years, without

a history of mental disease. There is no evidence of developmental mental impairment among his brother, sister, grandparents, aunts, uncles or cousins. No intermarriages have taken place among his blood relatives. The patient's wife, whom he married in 1931, and their four year old daughter are both normal.

Prognosis.—Since the patient's commitment to the psychopathic hospital in July, 1933, his prognosis became very grave. He has steadily lost ground with a rapid mental deterioration, dating from February, 1933, with simple character changes to the present state of apparently permanent mental impairment.

This patient presents the history of a person with a normal mental and moral character development. He represents a product of normal ancestors, and one whose blood relations and offspring are without any traces of mental disease. His present illness dates from August, 1931, at which time he received a head injury, as well as other less important injuries, while he was performing his duties. His complaint of a constant headache dating from the accident, gradually converged into the definite and final form of dementia precox, effecting a very grave prognosis. An injury to the head appeared to be the cause for the development of dementia precox in a person who up to the time of injury was apparently normal.

Some medical authorities express the opinion that there may be a causal relationship of injury to dementia precox in apparently normal individuals who would have been otherwise free of this malady. Furthermore, clinical experiences relate the fact that there is no definite time interval between the occurrence of the injury and the beginning symptoms of dementia precox. In some cases there is a considerable length of time before the symptoms may be clinically recognized following such injuries.

White⁷ states that dementia precox may follow an injury or trauma with the mental symptoms not occurring for a considerable length of time later. He points out that it is a psychosis in which the factor of deterioration is the precocious symptom rather than the individual. Furthermore, heredity possibly plays such an uncertain rôle, that he doubts that heredity has any influence in the predisposing to this affection. He shows that dementia precox has resulted in normal and brilliant people without any hereditary taint, with the physical force acting as an exciting cause.

Fuller² points out that trauma is an accepted factor as a precipitating cause of

dementia precox. He states that in its course, after apparent recovery from the primary effects of head injury, whether mild or severe, the patient may recover physically, but he may be left with a change of personality, with its subsequent development. The injury, therefore, would assume the initiating and responsible cause for this malady.

Kammon⁴ states that dementia precox may occur without hereditary trait, and that it may be predisposed by the exogenous factor of trauma, as well as by endogenous factors.

Meyer,⁵ in his discussion of trauma on the nervous system, divided the effects into two groups, the direct local and the subsequent psychotic groups. In the latter group, dementia precox may be found among the various psychoses, which, following trauma, may assume a permanent character. He points out that following some injuries to the brain an alteration in the personality occurs, with trauma acting as the precipitating factor. Thus a life that had been efficient up to a certain point, where it was punctuated by trauma, had fallen off in efficiency progressively since.

Glueck³ shows cases in which head injuries were followed by mental disturbances, among which are cases of dementia precox. The patients cited in these cases did not have mental symptoms immediately following the injuries, but, instead, months and years elapsed before psychotic changes were clinically evident. He pointed out that, since brain injuries may have such a detrimental effect on the patient's future life by the production of dementia precox, the injury assumes the cause of the definite liability from a medico-legal point of view.

Recent European medical literature further reveals the causal relationship of trauma or injury as a factor in precipitating this condition. Bertolani,¹ in an Italian manuscript, reports three cases in detail in which trauma is the responsible factor in the causation of dementia precox. Rojas and Belby,⁶ writing in Italian, discuss the rôle of trauma in the formation of dementia precox with the positive reference of trauma as the etiologic cause. In this article, they also cite Dumas, who reported sixteen cases, from a very extensive series collected from the ranks of soldiers, in which dementia precox resulted from trauma.

Summary

Although dementia precox is very common in occurrence, and is easily recognized by its appearance and subsequent behavior, it nevertheless presents, in its entirety, many baffling details. The etiology is as yet only incompletely solved. Adding to this complexity, trauma is found to be a factor in a small percentage of cases. A case was presented with the occurrence of trauma as an important etiologic factor in the development of dementia precox. Medical authorities, American and European, substantiate the opinion of the causal relationship of trauma in the precipitation of some cases. Furthermore, a considerable length of time may elapse from the time of the injury to the appearance of psychotic changes. Thus

there may be a latent development in individuals who were thought to have recovered physically from the effects of an injury. Therefore, trauma should be added to the etiologic forces of dementia precox, even though it is at present known to be infrequent in occurrence.

Bibliography

1. Bertolani, A.: Sindromi Schizofreniche Acutissime Post-Traumatiche. *Rev. sper. di freniat*, 58:1036-1042, (Dec. 31) 1934.
2. Fuller, D. H.: Traumatic psychosis. *Cyclopedia of Medicine*, 10:582, 1934.
3. Glueck, B.: Traumatic psychosis and post-traumatic psychopathic states. *Jour. A. M. A.*, 56:943-948, (April 1) 1911.
4. Kammon, G. R.: Schizophrenic reactions following influenza. *Jour. A. M. A.*, 94:1286-1288, (April 26) 1930.
5. Meyer, A.: The anatomical facts and clinical varieties of traumatic insanity. *Am. Jour. Insanity*, (Jan.) 1904.
6. Rojas, N., and Belbey, J.: Traumatismi e Demenza Precoce. *Arch. di antropol. crim.*, 53:576-582, (Sept.-Oct.) 1933.
7. White, W. A.: *Outlines of Psychiatry*. Page 171, 1923 edition.

AN UNUSUAL CALCULUS FORMATION FOLLOWING AN ACCIDENT

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It is common surgical experience that hemorrhage into the tissues is found at times to form the nucleus for the deposit of calcium salts. Various theories have been advanced for the formation of renal calculi. Probably the most common is infection together with endothelial cells which forms the nucleus for the deposition of normal salts of the urine. This is probably the usual cause for renal calculi, namely, infection, sloughing of the endothelial lining of the uriniferous tubules and then crystallization of the urinary salts. The following case seems to have a somewhat different origin, namely, injury to the kidney, which was productive of hemorrhage. The hemorrhage would appear to give occasion for the deposition of calcium salts which are undoubtedly augmented by deposits of urinary salts. It is difficult to be exact in regard to a possible complication of tuberculosis, considering the family history of this patient.

Case Report

The patient was a white man, nineteen years of age. He complained of hematuria following a skating accident.

Family history.—His father died of diabetes; his mother is living and well; one brother has active tuberculosis, another has spinal disease, a possibility of Pott's disease; and one sister is tubercular. Besides the usual childhood diseases, the patient had influenza in 1920; tonsillitis in 1922; he had a tonsillectomy in 1923. In 1927, he had an attack of rheumatism.

His present illness began in February, 1932, while skating, when he fell several times. A little later, he slipped on a tile floor with his skates on, falling backward. He landed on his right side, and although he felt no pain at the time, he ascribes his illness to this fall. Having lost his ordinary shoes, he was compelled to walk home on his skating shoes for a distance of six blocks. This, he believes, made his condition worse.

He had forgotten about the accident until later in the day, when, upon micturating, he noticed blood. As he was afraid to lose his position, he did not tell his family about this for two days. When the bleeding did not cease, he became frightened and consulted the writer.

Examination of the patient revealed tenderness on the right side on palpation. Urinalysis disclosed red blood cells, white blood cells and albumin. The patient was immediately ordered to bed; with ice packs on the right side; a hypodermic of morphine given, and was placed on a skimmed milk diet. The urine cleared up after three days, and as the patient felt better, he returned to work without consulting his physician. The exertion caused a return of the hematuria. He again became frightened and called his physician. He was again ordered back to bed; this time the hematuria lasted for nine days. In view of this fact, and the tubercular family history, I urged hospitalization, and if necessary operation, but the patient and his family refused.

The patient remained in bed for five weeks before he was allowed to leave it. He made an apparently uneventful recovery. He was on a restricted diet and cautioned against any type of exertion or work that necessitated any effort on his part.

At times, he complained of feeling an ache on his right side in the kidney region, if he stood in one position for too long a time, or if he exerted himself unduly.

This continued until March 16, 1934, when the patient, after lifting some boxes, felt a sharp pain on the right side in the kidney region. This pain radiated downward toward the scrotum, and was of

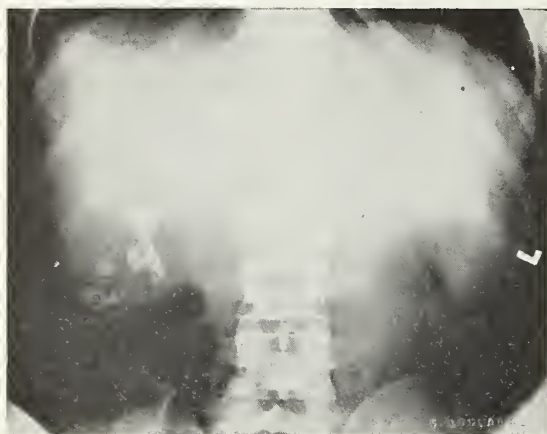


Fig. 1. Note "dumb-bell" shaped calculus.

a dull ache in character. It lasted for about a week, and was followed by a burning sensation on micturition and occasional nocturia. He was again placed on a strict diet, and intravenous urographic studies were made at three different times.

The following x-ray reports are self-explanatory. Found: "Calculus apparently in the pelvis of the right kidney, also a bunch of what appears to be calculi. The plain, as well as the intravenous urographic plates showed a large renal calculus on the right side. Following the injection of the dye, the radiograph showed the left ureter but not the

right; evidently the right kidney was not functioning or only slightly so, and it appeared to be a hyper-function of the left kidney since the dye appeared in the bladder less than five minutes after the injection."

In view of the tubercular family history, surgical intervention was advised, as it was felt best to perform a nephrectomy and so spare the left kidney the same fate as the right, but it was refused.

The patient has had periods of good health, but on exertion he has aches and pains in his back.

Another x-ray was taken June 12, 1934, and the report of this study was as follows:

"There is an extremely large number of calcium deposits in the right kidney, and the right kidney is enlarged to twice its normal size. The findings are suggestive of a tubercular left kidney."

The next radiographic study was made on January 26, 1935, and the report follows:

"The calcareous deposits are still shown in the region of the right kidney. They have increased slightly in size since the previous examination."

At the present time, the patient complains of pain in the back, in the region of the right kidney, but that it does not radiate towards the front and downward as it formerly did. He still has attacks occasionally when he tries to lift anything and still refuses operative intervention.

In view of family tubercular history and the continued calculi process a nephrectomy is indicated.

The rôle that the accident, the blood, as a foreign nucleus for calculus formation, or the rôle that the tubercular condition played in the formation of these calculi, in this instance, at best would be speculative and therefore will not be discussed in this report.

The possibility of the other kidney becoming involved is but a question of time.

Attention is called to the "dumb-bell" shaped calculus in the accompanying illustration.

TEMPORAL BONE INFECTIONS*

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In order to present some facts concerning our experience in handling temporal bone infections, I must first present otitis media in infants. This is one of the most frequent infections of infancy and one often not diagnosed during the complete physical examination.

The presence of a middle ear infection can be detected only on the basis of objective signs. General pathologic signs of middle ear inflammation in infants are not definite as in later life. The structure of the eustachian tube being relatively larger and straighter, favors the development of otitis media in infancy. In most cases the otitis develops because the mucus forced through the tube carries infection. At times the mucus merely plays the rôle of a foreign body, causing an irritation. It becomes infectious when infection from the nasopharynx reaches it. The manner of nursing a child may be a factor in forcing infection into the nasopharynx by interfering with nasal breathing and consequently with swallowing. Whenever possible the head should be elevated during a nasopharyngeal infection

and during nursing to help drain the nasopharynx.

The presence of an acute middle ear inflammation is sometimes evidenced by the infant's lack of response to its surroundings, general weakness, sleeplessness, crying, refusing to take nourishment and failure to gain weight. If the child is four months old or more he may indicate the trouble by rubbing the ear or sticking his finger into it. Often swelling of the lymph glands in the vicinity of the ear is observed. Occasionally, a loss of one of the little crevices in the skin back of the ear, due to edema and

*Read before the Section on Pediatrics at the annual meeting of the Michigan State Medical Society, Detroit, September 24, 1936.

swelling, is noted. There is a definite rise in temperature, and nervous symptoms are frequently present. Even definite signs of meningitis are observed in some cases. Many of these cases have gastro-intestinal symptoms. These syndromes have been of interest to me for the past ten or eleven years. During that time quite a controversy has been waged and a mass of literature has accumulated. The profession has become sharply divided into two schools—one claiming there is no relation between mastoid infection and nutritional disturbances and the other holding that infection within the temporal bone is the dominant factor in the malnutrition and the direct cause of the accompanying diarrhea.

The first cases, in this country, showing this syndrome, were reported by Dean, at the University of Iowa, following an epidemic in 1921 and 1922. Infants with otitis media, diarrhea and intestinal disturbances died within twenty-four hours after myringotomy was done, and at autopsy pus was found in the mastoids.

Here at our hospital in 1925, we had an epidemic of nasopharyngitis in children, and infants particularly, accompanied by vomiting and other gastro-intestinal symptoms with a large percentage of otitis. Large numbers of infants were admitted to the Children's Hospital with histories of feeding disorders and malnutritious. They had diarrhea and progressive loss of weight despite good feeding. Many had antecedent or coincident otitis. Many of these cases died very suddenly; other cases improved upon opening the ear drums, only later to have a return of symptoms, return to the hospital and die before an operation on the mastoid could be carried out. Numerous postmortems showed purulent mastoiditis findings without ordinary clinical surgical indications, and sinus thrombosis, meningitis and encephalitis were common terminations. Dr. Witwer, in charge of the Pathological Laboratory, reported twenty-seven cases not operated.

This led to a more careful observation of the ear conditions in infants suffering from diarrhea. From 1924 to July, 1926, we observed 520 cases of otitis in infants under two years of age. Of these, 174 were diagnosed as having mastoid infections and seventy-two had gastro-intestinal disturbances. These cases were seen with Dr. T. B. Cooley, the pediatrician in charge, and,

after careful otological and medical study, twenty-nine were operated for mastoid drainage. Twenty-seven of these cases were improved and twenty-two died. Of the twenty-three not operated fourteen died and nine lived to time of discharge. Later our percentage of mortality was much lower as we were operating these cases earlier. We were also using local anesthesia during operation as well as blood transfusions, both indirect and direct. Our operative findings convince us that in many cases we had overlooked this obscure type of infection. Occasionally the ear drums of these infants showed conventional signs of acute suppuration though in the majority of cases redness and bulging of the drums are not present, both of these symptoms in the adult and older child the result of pressure. In the infant, however, the pressure in the middle ear is relieved by spontaneous drainage of the abscess in the ear through the relatively larger, straighter and shorter eustachian tube. The drums were usually dull gray with a thickened appearance. However, the mastoid and petrous apex is not so easily relieved and these two parts of the temporal bone must not be forgotten when examining a case of otitis media.

The prognosis of all infections of the temporal bone depends upon whether pus has a chance to flow out of the tympanic cavity. The sooner paracentesis is done, after diagnosis, the better. I do not, however, believe that clinical results in the hands of some experienced operators justify indiscriminate operation on the mastoids of every baby with ear infections and nutritional disturbances. The sane view to take of the mastoid, or I prefer to say temporal bone, is that it is a potential focus of infection and as such every case of acute otitis media should be followed up even after the drainage from the ear stops. In looking for foci of infection the history of previous attacks of ear infections and trouble should be noted when the history is taken. The classical symptoms many times are not present because the infant's resistance is so low that he is not capable of producing much local reaction. I believe that the question of which is the cause and which the effect is purely an academic one but that once definite infection within the mastoid has become associated with nutritional disturbances a vicious circle is established. The child cannot get rid of the gastro-enteritis or gain

weight because of the infection of the temporal bone, nor can he conquer the infection because of his lowered resistance. If the circle can be broken—medically by increasing his resistance to infection or surgically by eliminating the focus of infection, while he can still withstand surgical manipulation or procedure—he will recover; if not, he probably will die. If he lives without surgery he should be observed frequently for months.

I wish to here present an interesting instance showing what happened in a case of otitis media which was not followed up, since, due to the fact the ears had stopped draining, the ears were thought to have healed. The infant was seen by a physician three weeks before admittance to the hospital, at which time it was given ear drops. Two days later both ear drums ruptured spontaneously. The ears were irrigated with boric solution and at the end of 5 days both ears stopped draining. About this time the mother noticed swelling behind the left ear, followed in 2 days by swelling behind the right ear. The left ear swelling increased and became fluctuant. Meanwhile neither ear showed discharge. On admittance to the hospital there was a subperiosteal abscess over each mastoid and examination of the ear drums showed no bulging or acute inflammation but the drums appeared dull and thickened. The child was operated on the same day for a double mastoidectomy. Both mastoids were well broken down. Child was discharged 10 days later and the ears were again dry and the mastoid wounds were draining slightly.

Much has been written concerning the cellular structure of the temporal bone and its response to infection. We are particularly indebted to Eagleton, Glick, Kopetzky and Almour for the work done on this subject and the clinical manifestations of petrositis. However, it must be borne in mind that in classifying temporal bones as to types of anatomical structure, no definite criteria have been established.

In an article published two years ago, in which the Wittmaack theory of pneumatization of the temporal bone was quoted, I stated that the large pneumatic type of mastoid usually had a cellular petrous apex. The more recent research work on the structure of this bone has shown that extensive pneumatization in the mastoid is present much more frequently than pneu-

matization in the petrous pyramid and the apex. The usual classification of types of bone is sclerotic, diploic and pneumatic. The greater the degree of pneumatization in the temporal bone the greater is the facility with which infection spreads through it. It spreads between the various perilabyrinthine cells from the middle ear and mastoid antrum into the petrous pyramids by four or five pathways which have been described by different anatomists.

Batson, of Philadelphia, in his study of venous circulation of the head, has shown that one might consider the head and neck to be a vast communication of venous plexuses in which the scalp, the skull bone, the brain and mucous membrane, are embedded. The bony barriers, which are so real in surgical approaches, are valueless in resisting progress of infection by way of the veins. By means of a new method of injection his specimens reveal the close relation of the blood sinuses to the vessels of the brain and dura. He even believes it is useless to ligate the jugular vein in sinus thrombosis, due to the many by-passes for carrying infection. This has not been our experience.

When one studies, carefully, the work and theories put forward by Eagleton, and bearing in mind this work of Batson's, we cannot help but feel that infection of the temporal bone must be considered as a blood stream infection as well as a bone infection and it is quite surprising that complications of a metastatic nature are not more common. We know bacteriæmia is not unusual in acute temporal bone infections.

Eagleton has shown that the apex of the very young infants is filled with red bone marrow. Mastoiditis, in infants, runs a course which is characteristic of a true osteomyelitis for it is a blood space pathological process, that is, suppuration within bone marrow spaces. This will also explain why the mastoid of infants may give rise to toxic symptoms, diarrhea and the like which do not occur in infection which is confined to suppuration of older or pneumatic bone. This infectious process in pneumatic bone is known as an osteitis and when destruction of cell walls takes place it is the coalescent type.

Sometimes an operation on a mastoid reveals little or no pus in the bone but the bone spaces are filled with granulations. This is the bone marrow method of con-

trol of infection and may have gone on to recovery without further bone destruction, the granulations representing the reparative process. Cure is obtained in over 80 per cent of all apical infections simply by drainage of the suppuration of the mastoid.

In many cases of osteomyelitis of the apex there are signs of venous sepsis—a chill or a chilly sensation at the time of invasion, followed by an up and down temperature. This leads to the diagnosis of lateral sinus thrombosis and the jugular vein has been ligated by the attending otologist in more than one instance. Exploration of the sinus fails to reveal a clot.

If the osteomyelitic focus suppurates and extends to the surface, the resulting abscess may be subdural or it may extend in the vault of the pharynx behind in the region of the eustachian tube.

Therefore, otitis media cases should be watched for evidence of pharyngeal abscess. Thus it may be stated that surgery of the apex resolves itself into two distinct lesions, namely: abscess formation which requires evacuation and infective thrombophlebitis of small vessels which requires rest and patient watching until it, in time, either undergoes resolution or breaks down into pus, when that pus must be evacuated, but it must be evacuated at a point farthest away from any inflamed vessels that enter the dura. If quiescent infected vessels that pass through the dura into the meninges are surgically injured, meningitis is apt to result. It is also well recognized that if a fistula can be found anywhere in the mastoid area, it leads into the part of the apex that is diseased and the enlargement of the fistula, in most instances, furnishes adequate drainage. These fistulas are frequently located during the complete mastoid operation. I like the word complete rather than simple mastoidectomy. I prefer to think of the simple mastoid as mastoid antral drainage without complete operation.

When dealing with a case of acute otitis media, of highly septic type, an x-ray study of the cellular development in the mastoid and petrous bone should be made as soon as possible to determine the type of bone structure.

Orbital and retro-orbital pain or sixth nerve paralysis, coming on at any time during this acute stage, should arouse suspicion of infection developing in the petrous cells. Continued pain, continued fever, continued

aural discharge or a reappearance of aural discharge after it has ceased, all indicate the necessity of further study. A specific type of facial paralysis, seen in no other process, has been described, a partial nonclosure of the lower lid during sleep, although the conscious ability to close the lid is not lost. This symptom is transient in duration.

Roentgenograms of the petrous bone should be taken in different positions to show the pyramid at different angles. In this way we gain as much information as possible of the progress in cellular obliteration or bone changes. However, the combined x-ray findings must be correlated with the clinical.

In defining treatment, myringotomy and complete simple mastoid are conservative methods, while radical mastoidectomy and some surgical approaches to the petrous apex are considered radical measures.

Granting that an adequate myringotomy has been done without relief of symptoms, then complete simple mastoidectomy should be performed. Following this, time should be given to determine what clinical results follow the complete simple mastoidectomy. Should the symptoms progress rather than subside, it is now time to do a radical mastoidectomy.

Should there be merely discharge, without pain, meningeal signs or perilabyrinthitis in an individual whose hearing was normal previous to the acute middle ear infection, the important structures in the middle ear should not be sacrificed too quickly by radical operations.

I think the results of early operation in acute mastoiditis speak for themselves. Arguments in favor of early operations are that meningitis will be prevented and a chronic otitis media will be avoided. In reviewing our statistics and those of other writers, we are encouraged and convinced that early operation produces more complications and a longer period of convalescence. In most instances judicious delay is often more difficult to follow than hasty operation. Results certainly justify waiting for resolution or for a well developed coalescent mastoiditis, except in occasional cases with sinus thrombosis or beginning meningitis. When early, operation may be life-saving. There is nothing in acute mastoiditis which resembles the situation in acute appendicitis, where delay in operation may be fatal.

IDIOPATHIC HYPOCHROMIC ANEMIA WITH REPORT OF CASES*

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This disease, which was first noted by Faber in 1909, has been thoroughly described in recent years by Clough,² Dameshek,³ Witts,⁶ and many others. Ninety-five per cent of the cases occur in women between the ages of twenty and fifty.

The disease is insidious in its onset and the symptoms are those of a moderate anemia, such as loss of energy, increase in weakness, and fatigue. The average patient is ill five to eight years before treatment is instituted, although the condition may be preceded by an acute infection or pregnancy. As the disease progresses, palpitation, shortness of breath, tinnitus, vertigo, and exhaustion, and symptoms of chronic indigestion, such as loss of appetite, flatulence, eructations of gas, constipation, vomiting, abdominal pain and diarrhea may be present. These symptoms will cause a curtailment of the intake of fluids, meats, and vegetables. The patient at this time may complain of a sore tongue and mouth, sore throat, and dysphagia, the so-called Plummer-Vinson's syndrome. Nervous manifestations, such as irritability, fatigue, paresthesia of extremities and menstrual disturbances, may also make their appearance.

Examination usually reveals a somewhat yellowish and waxy pallor with dry and brittle hair. The skin is elastic and wrinkled. Nutrition may be good. The tongue usually shows papillary atrophy, and glossitis may extend to lips and cheeks. Systolic murmurs may be heard over whole heart, and blood pressure is usually low. The spleen is enlarged in a large percentage of cases, and the liver may be also enlarged. The nails are very characteristic. They show a loss of luster, are thin, brittle, and longitudinally striated. They may be loosened from the nail bed and assume the characteristic concave or spoon-shaped appearance.

The red blood count, as a rule, is between 3,500,000 to 4,000,000, with a low color index. The size of the individual red blood cell, its volume and saturation index is reduced. Red cells show an almost transparent colorless center with elliptical shapes. Anisocytosis and poikilocytosis are present. Reticulocytes are normal. Minimum resistance of cells to the salt solution is diminished, but maximum resistance is increased. Vandenberg reaction is normal. Icterus index is normal. A moderate relative or absolute granulocytopenia may be present. Blood platelets, bleeding and clot-

ting time are normal. Gastric secretion shows an achlorhydria in most cases, even after stimulation with histamine. There is usually a large amount of mucus present, secretion is increased in volume and ferments are reduced.

The disease is usually chronic and protracted in its course. There are no spontaneous remissions or exacerbations. It is rarely fatal and death is usually due to intercurrent disease. Some improvement tends to occur after the menopause. Autopsies are rare in these cases. Sternal puncture shows an increase of normoblastic tissue. Red hyperplastic marrow is found.

Case 1.—A white woman, age forty-eight, reported to the Clinic, stating that she had been well until about eight years previously, when she noticed a gradual onset of fatigue and loss of ambition. Even moderate effort produced severe fatigue. Three years later she noticed a change in her finger nails, which began to assume a concave appearance, this condition becoming more marked as the fatigue increased. During the last two years she has lost twelve pounds in weight. Eighteen months previously her menstrual periods had become less frequent and more severe, with the addition of hot flashes. These menstrual changes were also accompanied by difficulty in swallowing and a tightened, choking sensation in the throat. Her past history revealed that she had suffered from hay fever for many years, was chronically constipated, and had had a dilatation and curettage performed twenty years previously.

Physical examination revealed slight elevation in temperature, pulse ninety, and a normal blood pressure. She was rather undernourished. The skin presented a lemon color. The tonsils were of moderate size with reddened and injected pillars. The tongue presented a smooth appearance. While the heart was not enlarged, there was a systolic murmur at the pulmonic area. The nails were thin, lusterless, and were concave in shape. The physical examination revealed no other abnormalities.

The basal metabolic rate was minus six. Skin sensitization tests showed a four plus reaction to large and small ragweed, cocklebur, marsh elder, and wormwood. Gastric analysis with histamine stimulation revealed no free hydrochloric acid in the gastric contents. At the time of admission, the hemoglobin was 62 per cent, and red blood cell count, 3,670,000. Kahn and Kline tests were negative. Urine examination was essentially negative.

*From Alexander Blain Hospital.

Chest and gastro-intestinal x-ray examination did not reveal any pathology.

The patient was given a general diet, and, for medication, sixty to seventy grains of reduced iron

diet with six to nine grams of reduced iron a day. She was also given several transfusions. She writes from out of town that she is feeling greatly improved.



Fig. 1. Hands of patient in Case 1.



Fig. 2. Hands of patient in Case 2.

a day. In the beginning she was also given some liver extract and later was desensitized with ragweed extract. Under this therapy she made marked subjective improvement and five or six months later her hemoglobin registered 84 per cent, with a red blood cell count of 4,300,000. Her finger nails also gradually assumed a more normal appearance.

Case 2.—A white woman, age forty-seven, was admitted to the hospital, complaining that, since she was twelve years of age, she had suffered with hives over the whole body when coming in contact with rabbits. The urticaria would be accompanied with swelling of the face and shortness of breath. She had also experienced swelling of the labia. For the last few years she had noticed the gradual onset of marked fatigue, numbness in the hands and feet, and a dark pigmentation of skin. Four years ago all the finger nails had come off, and after they had grown out again they began to assume a peculiar shape. She had, also, noticed the development of difficulty in swallowing. There was no loss of weight. Her past history was relatively unimportant. The physical examination showed a fairly well nourished middle-aged woman with a generalized icteric tint to skin. All the upper teeth were carious. Mucous membranes of the mouth and throat were very pale. The tongue was smooth with rounded edges. There were some tonsil remnants. There was some impairment of the percussion note at the left base with mixed râles in this area. The heart was slightly enlarged to the left, with a soft systolic murmur at the apex, not transmitted. A rather generalized slight tenderness was elicited over the whole abdomen. The labia were swollen and edematous. Nails were thin, pale, and presented a marked concave appearance. There were no other abnormal physical findings.

Laboratory examination revealed a normal urine, hemoglobin of 49 per cent, and red blood cell count of 3,560,000, with a normal white count. Blood smears showed marked anisocytosis and poikilocytosis. Kahn and Kline tests were negative. Gastric analysis showed no free hydrochloric acid in any of the gastric specimens. Protein sensitization tests showed that she was very sensitive to rabbit hair, moderately so to ragweed and maple. The x-ray of the chest revealed a small area of increased density in the left lower lobe with co-existing pleurisy in the left costo-phrenic angle.

The patient was placed on a general and adequate

The cause of this disease is unknown. The most plausible theory is that it is a condition which inhibits maturation of the red blood cells. It may be due to defective gastric secretion⁸ and inadequate diet and lack of iron, blood losses during menstruation,⁶ infections, or, possibly, constitutional defects. Murphy⁵ feels that the condition is a continuation of chlorosis which occurs in younger girls, whereas Underwood⁷ is of the opinion that the disease is not related to chlorosis because of the difference in ages and the fact that chlorosis is frequently associated with hyperacidity. A differential diagnosis is not difficult when the characteristic symptoms and signs encountered previously are taken into consideration. The treatment consists of large doses of iron, from six to nine grams of iron ammonium citrate or three to six grams of reduced iron a day. Maintenance dose is usually two to three grams of iron ammonium citrate daily. A general and nutritious diet is, also, necessary. After institution of iron therapy, the reticulocyte count begins to rise on the second to third day, reaches a peak on the seventh to tenth, and gradually falls to normal, being higher the lower the hemoglobin. In about two months the hemoglobin will reach 80 per cent. Symptoms disappear gradually, although achlorhydria and papillary atrophy of the tongue persist. The patient may not completely lose the symptoms. Relapses occur within six months or a year if iron is stopped. A satisfactory daily rise of hemoglobin is 1 per cent. Liver extract may hasten recovery. Hydrochloric acid is of very

little benefit except to check diarrhea and digestive defects.

Mettier, Kellogg and Rinehart⁴ claim satisfactory response from feeding patients predigested meals with hydrochloric acid and pepsin. Beebe and Wintrobe¹ noted no response from feeding beefsteak, predigested, with normal gastric juice.

Summary

1. Idiopathic hypochromic anemia is a definite clinical entity with characteristic signs and symptoms.

2. Its cause is unknown, but the disease is probably due to some process which prevents maturation of the red blood cells.

3. Two typical cases are described.

4. Treatment consists of adequate diet and large doses of iron.

Bibliography

1. Beebe, Richard T., and Wintrobe, M. M.: Effect on idiopathic hypochromic anemia of beefsteak (Hamburger steak) digested with normal gastric juice. *Arch. Int. Med.*, 52:464-470, (Sept.) 1933.
2. Clough, Paul W.: Idiopathic hypochromic anemia. *Int. Clinics*, 3:1-23, (Sept.) 1935.
3. Dameshek, W.: Primary hypochromic anemia. *Jour. A. M. A.*, 100:540-548, (Feb. 25) 1933.
4. Mettier, Stacy R., Kellogg, Frederick, and Rinehart, Jones F.: Chronic idiopathic hypochromic anemia. Etiologic relationship of achlorhydria to the anemia with special reference to effect of large doses of iron, organic (dietary) iron and of predigested food upon formation of erythrocytes. *Am. Jour. Med. Sc.*, 186:694-704, (Nov.) 1933.
5. Murphy, Wm. P.: Factors concerning treatment of anemia. *N. Y. State Jour. Med.*, 35:973-976, (Oct. 1) 1935.
6. Minot, G. R.: Idiopathic hypochromic anemia. *Libman Anniv.*, Vol. II, pp. 831-845.
7. Underwood, Chas. C. Idiopathic hypochromic anemia. *Jour. Kans. Med. Soc.*, 35:175-180, (May) 1934.
8. Wintrobe, M. M., and Beebe, R. T.: Idiopathic hypochromic anemia. Report of twenty-five cases. *Medicine*, 21:187-243, (May) 1933.

CASE OF CYST OF ROUND LIGAMENT SIMULATING INGUINAL HERNIA

Short Résumé of Literature

W. S. MARTIN, M.D.

LUDINGTON, MICHIGAN

While any kind of tumor of the round ligament is sufficiently rare to be of interest, true cysts of that structure are practically unheard of. By true cysts, I mean those of distinct origin, fluid-containing, and lined by columnar or cuboidal epithelium. Hence, it might not be amiss to give a short résumé of the literature, which is not very extensive. A search for cysts of the round ligament, or those simulating hernia, immediately brings to light many round ligament tumors, but practically all solid, and a large proportion of those endometriomata. A very few cysts of the uterus have been reported. These cysts, however, invariably have been due to breaking down and cystic degeneration of myomata or aberrant ovarian tissue associated with other cystic degeneration; showing fibrous, fibromuscular or lutein tissue, not epithelial lined, and not true primary cysts.

A few tumors of the round ligament, simulating hernia, are reported, but all of these are solid tumors. Sampson, in his very complete search of the literature with report of his personal experiences, stated that, in 1903, Emanuel collected seventy-five cases of tumor of the round ligament; fifteen of them were myomata and many "adenomyomatous." Taussig, in 1914, succeeded in finding one hundred thirty-five cases, thirty of which were adenomyomata, no mention being made of cysts of any kind. In eight cases of endometriomata of the round ligament, all showed other pelvic

involvement, and were not primary in the round ligament.

The nearest approach to a cyst of the round ligament which I am able to find, is one reported by Hamblen, of Duke University, which had its origin in the wall of the uterus at the junction of the round ligament and uterus and did extend for a short distance along the round ligament. Hamblen says, "Large intramural cysts arising in the uterus and lined by true epithelium are rare."

The same could well be said of true cysts of the round ligament; due to their similarity in structure and origin. Hamblen's cyst was lined by true columnar epithelium; but also contained a few decidual cells in its walls, there being a pregnancy in the uterus at the time. He further ventures the statement that its origin may have been from

the müllerian ducts. However, the controversy, whether wolffian or müllerian in origin is outside the scope of this paper. Kaulich and Gömöri, writing in the *Journal of Obstetrics and Gynecology of the British Empire*, states that in 1,290 cases of endometriomata mentioned by Polster only thirty-four were of inguinal (round ligament) localization, none of them cystic.

McNeil, of Belfast, reports a cyst of the round ligament, arising from the cystic degeneration of aberrant ovarian tissue, and associated with cystic change of the ovary on the same side. This cyst was of typical lutein lining, being filled with tarry material. In his textbook of Gynecology, Graves says: "Tumors of the round ligament are comparatively rare. Taussig's latest search of the literature reveals only one hundred forty-one; none of them is a true cyst. Cysts of the round ligament may arise from other tumors and if they are in the inguinal region may simulate hernia; for pathologically, solid tumors of the round ligament are prone to cystic and telangiectatic change, the walls showing the adenomyomatous structure, characteristic of the original tumor.

I am aware that the above résumé leaves many questions unanswered, but it must be so necessarily, due to the paucity of material available on round ligament tumors other than solid endometriomata. I was unable to find any instance of a round ligament cyst simulating an inguinal hernia, so I believe the following case will be of interest.

A white, American, unmarried woman, aged forty-three, entered, complaining of excessive flow at menstrual periods, with some intermenstrual bleeding, and a small bulge in the right groin. Her past history showed nothing of note except an attack of acute rheumatic fever at the age of eighteen, which had never recurred. Her present illness has extended over a period of about two years, during which time she has had very profuse menstrual periods, with some slight intermenstrual bleeding. The patient believed these to be manifestations of her menopause and did not consult a physician. The bleeding increased in severity and frequency and one year ago she consulted a physician, who, without examining her vaginally, prescribed ergot. This helped for some time, but the bleeding soon became severe again. Two years from the onset, the patient was also having some dyspnea and palpitation; she had also noted a small bulge in her right groin when she coughed or strained, which she thought was a rupture. There had been no appreciable loss of weight. The physical examination, at this time, showed a fairly well nourished, pale woman not acutely ill. The conjunctival and buccal mucous membranes were pale. Her thorax was symmetrical and lungs resonant; no râles were present. The heart was regular but fairly rapid. There was a soft systolic murmur at apex which was not transmitted. There was a harsher diastolic murmur in

the aortic region, transmitted half way down the left sternum. The radial pulses were equal. Her blood pressure was 130/60.

There was a firm, movable mass about twice the size of a grapefruit, palpable about four finger breadths above the symphysis and extending into the pelvis; it was not tender.

There was a small tumor which was soft and compressible, about the size of an English walnut, in the right inguinal region, giving an expansile impulse when the patient coughed or strained. Vaginal examination revealed a virginal introitus; free blood in vagina. The cervix was small, and open. The body of the uterus was uniformly enlarged to about eight times its normal size. It was smooth, firm, freely movable and not tender. The adnexæ were not palpable. The extremities showed pallor of finger and toe-nail beds. The reflexes were equal and active.

Laboratory: Kahn test, negative; red blood cells, 3,100,000; white blood cells, 9,000; hemoglobin, 30 per cent (Dare). Blood smear revealed hypochromia, otherwise not remarkable.

Diagnosis: (1) Large uterine myoma; (2) aortic regurgitation (rheumatic, fully compensated); (3) right indirect inguinal hernia; (4) moderately severe secondary anemia.

A midline suprapubic incision revealed a symmetrically enlarged uterus about eight or nine times normal size. Freely movable, definitely myomatous. This was removed supravaginally. Adnexæ were normal, ovaries showing involutionary change; not removed. In the right side of the pelvis, along the extraperitoneal portion of the round ligament, was a small, semi-turgid, globular swelling; apparently extending into the inguinal canal. This fluid-containing tumor was about the size of a small tangerine, being slightly ovoid, with the outer pole in the inguinal canal. Aspiration with hypo needle showed a thin, very dark, bloody fluid. The peritoneum was opened, and the cystic mass freed, by sharp dissection, down to the round ligament. Just as that structure passed through the internal ring. At this point, the cyst was intimately attached to the round ligament by a small, broad pedicle, which was ligated and severed. Cavity then closed with no drain. Abdomen closed in usual way, and patient made uneventful recovery.

Pathologic report is as follows: "A thin walled, cystic structure, contents partially evacuated. Sections show a thin, fibrous walled cyst, lined with low cuboidal epithelium, the wall well supplied by vessels."

Summary

1. A case of cyst of the round ligament simulating inguinal hernia is reported, occurring in a patient with uterine myoma.
2. Short résumé of literature is given.
3. Cysts of the uterus or round ligament are extremely rare. A true cyst of round ligament, simulating hernia, to the best of my knowledge, never having been reported before.
4. Practically all tumors of the round ligament are solid, the great majority being endometriomata, and usually associated with similar pathology in other pelvic organs.

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*"Every man owes some of his time to the up-
 building of the profession to which he belongs."*

—THEODORE ROOSEVELT.

EDITORIAL

HEALTH EDUCATION OF THE PUBLIC*

HEALTH education of the public may be accomplished by many methods, but the educator should be always the doctor. He knows more about the subject than any other person. Frequently he fails owing to the fact of inadequate pedagogic training. The non-medical educator is trained to teach but is not sufficiently schooled in the sciences which constitute medicine. Health and disease are antagonistic and have been so, as long as there has been life on this planet. One cannot fully comprehend health

if he knows nothing about disease and its prevention. We contend, therefore, that the medically trained person with fair teaching ability will accomplish more in the way of educating the public than a professional teacher with a small amount of medical knowledge. However, let us combine the two, the medical trained person and the educator.

Dr. W. W. Bauer and Dr. Thomas F. Hull have produced an excellent little manual* on the subject of Health Education of the Public, which is designed to assist the doctor to become in a real sense an educator. Many are the opportunities; noontide clubs, parent-teacher associations, women's clubs are all eager to hear health problems discussed. Foods, vitamins, balanced diets, diet in obesity, hot and cold weather diets are all subjects of interest; here the physician educator may be needed to correct or dispel the misinformation of the pseudo medical educator in some popular magazines, though we make haste to say that not all lay magazines are in this class. The majority are eager to publish the scientific truth on all these subjects and it is the duty of the medically trained person to furnish the information.

Health education may be simmered down to *matter* and to *method of presentation*. While the doctor has the basic training he may be not always in possession of specific data for a particular group or audience. Bauer and Hull discuss this subject in their chapter on Source of Materials. They also discuss the radio as a means of getting health information over to radio listeners. Valuable suggestions are made for the composition of radio addresses, particularly in regard to the advisability of using some words familiar to the physician but which are taboo to many of the laity. Advice is given against attacking nostrums and quackery over the radio, which attacks are likely to call forth counter attacks or replies which the radio is bound to permit to be broadcast.

The authors consider it definitely unwise to attempt a radio program with unidentified speakers. This statement is made in answer to objections by many members of medical societies, who consider it unethical for any member to receive the publicity which a radio address must afford. There are three technics for radio broadcasts of health information, namely, the lecture, the health interview and the drama. It is

*Health Education of the Public, A Practical Manual of Technic. By W. W. Bauer, B.S., M.D., Director, Bureau of Health and Public Instruction, American Medical Association; Associate Editor of *Hygeia, The Health Magazine*; and Thomas G. Hull, Ph.D., Director Scientific Exhibit, American Medical Association; Associate Professor of Bacteriology, University of Illinois, College of Medicine. 227 pages with 39 illustrations. Philadelphia and London: W. B. Saunders Company, 1937. Cloth, \$2.50 net.

almost needless to say that in addressing lay audiences, either directly or by radio, the physician speaker should avoid the technical language of medical literature.

Other mediums discussed are health exhibits. These are familiar to those who attended the Century of Progress Exhibition in Chicago, or the last annual meeting of the Michigan State Medical Society. Then there is the lecture platform. The direct address offers the greatest opportunity for the majority of physicians who are able to use it effectively. Yet it requires skill and experience in speech making. He who is gifted with a sense of humor will be accorded a ready welcome. The authors go into detail on such subjects as the preparation of pamphlets, the newspaper and magazine articles, the use of the lantern and books for lay education.

We know of no more widely useful book on the subject of health education and therefore commend it without reserve as a timely publication on a timely subject.

THE AMERICAN FOUNDATION

THIS JOURNAL contained editorial reference to the two volumes entitled "American Medicine, Expert Testimony out of Court," shortly after its publication. It is difficult to do the work justice in one or a dozen editorials. Since first reading it, we have perused reviews in numerous other medical journals as well as some in the lay press. One conclusion at least must be that the physician is truly an individualist. He does his own thinking, to a large extent uninfluenced by what others may think. The anonymity of his letters has afforded him a certain freedom which he has not hesitated to use. The reading of a number of reviews has convinced us that others have experienced the same difficulty as we have in commenting on such a heterogeneous mass of opinion. Another conclusion to which we are led is that over this broad land, no single solution of the problem of medical care can be made to fit all conditions. In other words, the wide variation in social and industrial life calls for special methods. The doctor in one of the southwestern states who makes visits all day without any hope of direct payment from his patients is justified in his plea for socialized or state medicine for everybody. In those states where people are

employed fairly regularly, there is no more reason for state medicine than for state fuel or groceries or clothing. Such is the expressed opinion of many others. We do not believe it would be popular with the industrious and thrifty citizen, who would object to a fixed tax on his income to defray the cost of medical service which he would probably not need. (The Capper Bill proposed six per cent.) Many feel that the state should reimburse the physician for the medical care of the indigent, not for the medical care of those financially able to care for themselves.

The care of infectious disease, including tuberculosis, is looked upon as a public health problem along with mental disease. These for obvious reasons are generally conceded as requiring some form of institutional care.

The institutional physician on full time naturally favors so-called state medicine. Our prejudices are born of our condition in life. Those individualistic doctors who prefer to stand or fall, depending upon their ability to appeal to patients, naturally resent the practice of medicine by the state in any except those instances in which institutionalized care is clearly indicated.

It has been pointed out that medical education has been socialized without any serious objection and that non-professional education as well is under state control. There are some objections, but we will pass them up. The financing of all educational institutions has become a serious problem, added to which the cost of socialized medicine would make the taxation load almost unbearable.

Speaking to a confrere after reading many excerpts of letters in American Medicine, Expert Testimony out of Court, he replied he had an opinion to offer on the medical situation. He was assured that whatever his opinion might be, it would be found somewhere between the covers of these volumes.

A few weeks ago we published the names of the writers from this state. Of course, it is rightly impossible to identify them but if the tenor of their letters is the same as we have heard them express themselves at medical meetings, there are but few dissenting views on the subject of state medicine.

While state or socialized medical care, as applied to those who can afford to pay, is the proverbial sore thumb at the present

time, the volumes deal in a most interesting way with numerous other subjects such as medical education, specialization, limitation of the number of medical students, et cetera.

We hope to return to these volumes to comment on other phases of the testimony, which we may do freely, since it is out of court.

AND NOBODY DOING ANYTHING ABOUT IT

WHEW! It's hot! For many, the year may be divided into two seasons, a wet and a dry. The dry is that period of the year when one's neck moves freely in his collar and when one is spared the discomfort of mopping his brow. In Michigan, particularly the lower part of the state, June, July and August are months of sweltering, if not of heat prostration. It is the time of exodus from the cities for those not fastened to their jobs; a time when the fierce rays of the sun are reflected from burning pavements; of hot nights and hotter days, with occasional thunderstorms which sometimes afford a brief respite from the heat; the time when the weather forecaster is listened to. Twice a year he becomes a prophet, namely, during periods of extreme heat and cold. Sometimes he proves to be a false prophet. Perhaps he is not to blame. Nature at times can be very erratic, refusing to be bound by scientific rules. She has every one guessing and wistfully thinking, but as Mark Twain used to say, "Everyone grumbles about the weather, but nobody does anything."

We have no advice to offer. Old Doctor Samuel Johnson used to say men require to be reminded rather than informed, so we will remind our readers of the warnings of the health officers. Bank your fires; eat little and that, fruits and vegetables rather than meats; move slowly; stay in the shade if possible; metabolize slowly; bide the time, for cooler weather will be upon us—some time.

WHAT'S THE USE?

LAST month has witnessed two daring spectacles that make us wonder what causes certain mental reactions in certain persons. A woman aviator attempted to fly the Pacific Ocean. The odds were dreadfully against her and she has not been heard of since. Is it possible that the demarcation be-

tween heroism and foolhardiness is scarcely perceptible? What would have been gained had she succeeded?

The north pole has long been the goal of explorers in the polar seas. In spite of the fact that the north pole has already been discovered, aviators from Soviet Russia have discovered over again the prized pole. But now that they have, is it worth all the renowned ambition? A British newspaper that concurs in our pessimism presents a graphic description of the pole sitters as follows:

"The Soviet expedition has now been there for two or three weeks, and the weather during their term of residence has apparently been about as beastly as it could be. It is not a matter of cold and frost; it is just abominably wet and even muggy. When it ceases to be muggy the wind roars and the rain pours into the tents where the Russian adventurers are vainly trying to dry their soaked clothing. Such is the summer of 1937 at the North Pole while the intrepid colonists rest damped upon an ice-raft floating above immeasurable miles of Arctic Ocean. One can only hope that science is duly served. Comfort certainly is not.

"Nor is there the least hope of any financial advantages to the totalitarian State whose flag has lately been hoisted over those inhospitable regions. Beneath the Arctic ice-raft (which according to some estimates is only about eighteen feet thick) there can be none of those metallic ores which Herr Hitler hopes to receive as a result of his unlikely conquest of Spain. There will be film and photographic rights and scientific observations as a result of this Polar occupation, but does any really determined dictator care two hoots for such immaterial contributions to the general knowledge of mankind? A number of drenching days on a thawing icecap—such is the immediate reward of occupying the North Pole."

JULIUS HENRY POWERS

An Appreciation

I MET him in his senior year at Ann Arbor, where he was on the student staff of Professor de Nan Crede who, more than once, commented on the excellence of Powers' work and his dependability.

Dr. Powers and I settled in Saginaw about the same time, where our acquaintance rapidly ripened into a friendship that continued until his passing a few days ago.

Throughout its long and notable history, the University Medical School never presented such a galaxy of teachers, clinicians and investigators as during Powers' student years. Vaughn, Cushney, de Nan Crede, Dock, Novy and Huber with Peterson, Canfield, Parker and Cowie just entering upon their work—all names to conjure with. Such was the atmosphere into which Pow-

ers was privileged to enter and his excellent pre-medical training, particularly in the Biological Sciences, together with a high degree of intelligence and fine intellectual honesty, fitted him for this unusual opportunity. Seldom have I met a man who exemplified to such a marked degree the subject matter of his training not only in its fundamentals, but also in its minutiae.

Dr. Powers was a successful practitioner in the best sense. His energy, devotion to his profession, insistence upon individual and professional progress and his meticulous care of his patients not only resulted in his own spiritual and intellectual growth, but also proved a constant stimulus to his professional associates.

He has a permanent place in that galaxy of great and earnest souls whose lives have set a standard for the profession they loved and served so well.

J. D. B.

The new Hygienic Marriage Law requiring all young people contemplating matrimony to submit to a blood examination before a marriage license is granted seems to be very popular—among newspaper editors. We surmise that all editors are married and that the law is not retroactive.

AMERICAN MEDICAL EXPERT TESTIMONY OUT OF COURT

Unfortunately, the implication in such a study (American Medical Expert Testimony out of Court) by an agency professedly interested in government, may not redound to the great advantage of the profession. Why, if we may emulate these books in proposing one more question difficult of answer, is it necessary to consider that medicine must be minutely examined as a phase of the study of government? Why, when there are so many other human activities causing actual hardship, suffering and even bloodshed, is it deemed necessary for outside agencies to delve into all the difficulties of modern medicine? Why, when medicine is surely, although admittedly slowly, putting its own house in order, cannot the profession itself be trusted to continue, as it always has, to provide better and better health for the people?

As such gratuitous studies go, however, this is by far the most readable and the most carefully presented. Fortunately, it is entirely free from the summaries, tables, figures and statistics which might have rendered it as sterile as a page from a book-keeping machine. It is composed of ideas, not conclusions. It answers nothing. It solves no problems. It raises questions and discusses them, but settles none. It presents much material which will require study for years to come.

It harvests no crop but rather plows the field, deeply in spots, superficially in others, and turns up soil which may provide the seed bed of changes which are to come. It contains such a plethora of

statements that, like Scripture, it will probably be quoted to many a purpose. And, in spite of a strong distaste for such inquisitions, this one is good reading.—*Northwest Medicine*.

DO NOT TAKE TO HYGIENIC MARRIAGE

It is not at all surprising to find that, with the advent of the new hygienic marriage law in Illinois, numbers of young people are traveling across the state lines in search of "cheap and easy" weddings in states as yet officially indifferent to the ravages of syphilis.

The same sort of thing happened in Connecticut after medical examinations certifying that candidates for matrimony were free from venereal infection became mandatory under the law.

But in the end the regulation worked out well, because a Connecticut wedding grew to have a special value.

It was a guarantee of safety from a fearful disease, both for the benedicts themselves, and for future children.

There is every reason to suppose that this will be so later on in Illinois, and in Michigan, especially after fugitive weddings begin to be suspect.

And they are bound to become so when the reason and necessity for hygienic laws are better understood among young people, many of whom now have little knowledge of the prevalence and devastating nature of the disorders from which the state is trying to protect them.

It is probable, too, that the time when all except the most backward states will have hygienic marriage laws is not far ahead. This in itself will put a blight on the fugitive marriage habit.—*Detroit Free Press*.

THE ENGLISH LANGUAGE SURE IS TOUGH

The English language, which appears to the manor born the most natural mode of verbal communication, evidently offers a great many difficulties to the foreigner who must learn it. We have culled the following specimen of orphan verse from the *Manchester Guardian* (author unknown).

A young man with plenty of dough;
Went out with his girl for a rough;
But the creek was so high
The girl said "Oh, migh!"
I think we had better not gough."

But the young man replied with a cough,
That he never was given to skough,
And would swear that the barque
Was safe for a larque,
And he thought they had better be ough.

Then away through the water they ploughed,
Though the girl seemed considerably coughed,
And said that the motion
Was just like the otion,
Except that the waves weren't so loughed.

They came to a bridge and went through,
Where they had a most beautiful viough
Of the great water tower,
And they stayed there an hower,
(It was late, or they might have stayed tough.)

But at last, when they'd rowed quite enough,
They tied up the boat by a blough,
And ran up the road
To the lady's aboard
With a haste which made both of them pough.

And yet our language spreads!

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One day each week for eight weeks, beginning the week of September 13. The following subjects will be presented in each center.

1. The management of edema. Cardiac. Nephritic. Nutritional. The neutral diet. Types of medication.
2. The clinical differentiation of back pain. Demonstration of cases. Anatomical specimens. Use of apparatus in treatment.
3. Benign tumors of uterus. Their differentiation and treatment.
4. Toxemia of pregnancy. Hemorrhage. Accidents.
5. Management of early syphilis. Syphilis of pregnancy.
6. Malignancies of the skin and mucous membranes. Demonstration of cases and treatment.
7. A key to the diagnosis of digestive complaints. The organic, reflex, systemic and functional disorders.
8. A discussion of the use and action of some of the newer drugs.
9. Acute and chronic prostatitis. Posterior urethritis. Newer methods of treatment.
10. Hypertension. A rational classification with newer methods of management.
11. Regulation of body fluids and the general care of children during acute illness.
12. The acute abdomen in childhood. The differentiation of abdominal pain in childhood.
13. Endocrinology. A critical survey of recently introduced products as applied to gynecological disorders.
14. The complications of acute suppurative otitis media. Facial nerve involvement. Intracranial complications.
15. Intestinal obstruction.

A program with dates and hours of the lectures and demonstrations in each center will be mailed soon to every member of the profession.

For information, address:

**Department of Postgraduate Medicine
University Hospital
Ann Arbor, Michigan**

President's Page

Medical Ethics

THE first code of Medical Ethics that we know of for the government of medical practice was that of Hammurabi, dated 2250 B. C. The monument on which it was recorded was discovered in 1901 on the Acropolis of Susa.

A second landmark, set up about 1800 years later, was to be found in the works of Hippocrates, the great Greek physician. These writings reveal a high conception of professional responsibility, noble moral ideals, and lofty aspirations for medical behavior.

At the beginning of the last century a publication appeared, "Percival's Code of Medical Ethics," published in 1803 and written by Dr. Thomas Percival. His writings were so good that they have served as a model for nearly all books and pamphlets published since that time on medical ethics. Even then with the rise of industrial manufacturing, Percival became impressed with the necessity of improving factory hygiene, and advocated regulations for ventilation, rest rooms and general cleanliness. In the code, Percival emphasized the combination of tenderness with steadiness in the management of charity patients. Discussion of the case before the patient, particularly when the outlook is bad, should be avoided, secrecy when required is strictly to be observed and females are to be treated with the most scrupulous delicacy. One hundred years later at a meeting of the American Medical Association held in New Orleans, May 7, 1903, a new code of medical ethics was drafted and in 1912 was revised to cover very completely the needs of modern practice of medicine.

The physician is one whose relation to life and health are of the most intimate character. It is fitting not merely that he should possess a knowledge of diseases and their remedy, but also that he should be one who may safely be trusted to apply these remedies.

Character is as important a qualification as knowledge for the successful physician, always keeping in mind the Golden Rule. For the average physician, medical ethics means only medical etiquette and there is usually as great a penalty attached to a transgression of one as the other. Medical etiquette is concerned with the conduct of physicians toward each other and embodies the tenets of professional courtesy. Medical ethics is concerned with the ultimate consequences of the conduct of physicians toward their individual patients and toward society as a whole.



President of the Michigan
State Medical Society

THE COST OF PRACTICING MEDICINE

By HENRY C. BLACK and ALLISON E. SKAGGS

Total Cash Income.....	\$10,062.84
Cash Expenditures:	
Rent	\$742.32
Drugs and Supplies.....	752.04
Salaries	984.72
Car Operation	418.32
Miscellaneous	694.92

Total Cash Expenditures..... 3,592.32

Net Cash Income.....\$ 6,470.52

THE above represents the average of fifty doctors practicing in the State of Michigan; selected figures taken from the largest to the smallest communities, and representing the large as well as the small incomes. In this group of fifty doctors are:

1. Eight men with less than \$6,000 per year gross incomes
2. Fifteen men with more than \$12,000 per year incomes
3. Twenty-seven men with incomes between \$6,000 and \$12,000
4. Seven men in towns of less than 8,000 population
5. Ten men in cities of over 100,000 population
6. Thirty-three men in cities between 8,000 and 100,000.

It might be interesting to note here that the large incomes are in no manner limited to the large cities, nor the small incomes to the small communities; in fact the average gross incomes varied very little regardless of location or size of the community.

We believe these figures should be of special interest to readers of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY for several reasons:

1. They were taken only from members of the Michigan State Medical Society.
2. They were taken by us direct from the records in the various offices, and these records were kept in a manner so that the classifications were identical, and no adjustments were necessary to make them comparable.
3. They are all the complete 1936 figures, representing paid expenditures with

no study of accrued expenses whatever.

4. Although the study is not extensive enough to say that they represent *average* incomes, they do represent a cross section of the better practices, some of them better than average incomes, perhaps, and certainly better than average business procedures.

Our reasons for making the different classifications should be self-evident. Rural communities have different problems than the average size cities; the largest cities have different situations than the medium sized cities. So our first table represents the classifications of expense in relation to income with the comparisons based on size of community. Table I shows the number of cents out of each income dollar spent for:

1. Rent, including heat and light
2. Drugs and supplies
3. Salaries
4. Automobile operating expense, including gas, oil, license, insurance, repairs, but *not* including depreciation or replacements.
5. Miscellaneous, all other cash expenditures properly charged to the business such as Medical Dues, Professional Insurance, Stationery and Postage, Laundry, Journals, Telephone, et cetera, but not including interest charges.
6. Total

TABLE I.

	Less Than 8,000	8,000 to 99,000	Over 99,000
GROSS CASH INCOME	\$1.00	\$1.00	\$1.00
Cash Expenditures:			
RENT	\$.04	\$.07	\$.09
DRUGS	.12	.06	.08
SALARIES	.05	.11	.10
AUTOMOBILE	.04	.04	.04
MISCELLANEOUS	.06	.08	.06
TOTAL	.31	.36	.37
NET CASH INCOME	\$.69	\$.64	\$.63

In this table several interesting things are noticed:

1. Total expenses bear an almost identical relationship to income in the

medium sized towns and cities, dropping slightly in the smaller communities.

2. While rents and salaries were lowest in the small communities, drugs and supplies were the highest, making the totals about the same.
3. Automobile expense kept a most consistent relationship to total income.

In Table II we have used the same classifications but with respect to size of incomes:

TABLE II.

	Less Than \$6,000 Per Year	\$6,000 to \$12,000	Over \$12,000
GROSS CASH INCOME	\$1.00	\$1.00	\$1.00
Cash Expenditures:			
RENT	\$.08	\$.07	\$.07
DRUGS	.12	.07	.07
SALARIES	.07	.09	.12
AUTOMOBILE	.06	.05	.04
MISCELLANEOUS	.08	.06	.08
TOTAL	.41	.34	.38
NET CASH INCOME	\$.59	\$.66	\$.62

In this table we notice:

1. Total expenses vary more than in Table I, with the medium sized incomes showing the lowest percentage of expense.
2. Drugs and supplies are proportionately higher in the low income bracket.
3. Automobile expenses are proportionately higher in the low income bracket.

To get the most practical value from this summary we would suggest that the reader compare these figures with his own as follows:

Reduce your 1936 figures to percentage of total income for each of the six classifications made in these tables. For instance, if your cash income for 1936 was \$8,459, and your rent for the year was \$600.00, the figure to use in your table would be \$600.00 divided by \$8,459, or .07, being the number of cents out of each income dollar which you paid out for rent. Now, if you are practicing in a town of less than 8,000 population you would be paying almost as much as twice the amount of rent as the average of this group, whereas if you are practicing in a city of 60,000 population your figure would agree with that in the table. By such a comparison you can learn more about the relation of your own situa-

tion to that of your colleagues, and it was with the hope that these figures would be of value to you that this study was undertaken.

CORRESPONDENCE

POSTGRADUATE MEDICAL EDUCATION FOR THE ENTIRE MEDICAL PROFESSION

Dear Dr. Dempster:

I have been much interested in the article on Postgraduate Education in Medicine by Dr. James D. Bruce in the June issue of the JOURNAL and your editorial comments.

Dr. Bruce gives us an interesting and instructive background in the growth of postgraduate instruction, but I would emphasize the necessity of its embracing all the profession even in a fuller degree. Much as the administration at Washington claims only to "seek coöperation of the medical profession in caring for the medically poor," the profession fully realizes in view of recent attempts to tie medical practice up with the Social Security Act, that in the end it is the intention of the New Deal to determine and to control the acts of the profession not only in its relation to the patient but in the conduct of its own affairs. Call it what you will, some degree of regulation or regimentation will follow. This, I believe, is admitted by all concerned.

It has been the history in all largely populated countries that this governmental dictation tends to lower the standard of the medical art unless strong efforts are made to keep the profession abreast of the advances in medicine by offering graduate courses at medical centers.

The undergraduate's work is well supervised; but the graduate's work is of his own volition. There is no compelling force nor urge to improve himself except the recognition of his needs.

As you know, the Michigan State Medical Society and the University of Michigan offer courses in postgraduate work. Improvement in the methods of teaching goes with acceptance of opportunity by the graduate, measured in terms of attendance. It is not only our privilege but a duty we owe the profession and ourselves, to embrace this opportunity. The future offers much to the earnest student of medicine, if he will accept this challenge in the inevitable changes in the social order by better preparation of himself for service to the public.

It is hoped and expected that funds for the constant improvement of these courses may be forthcoming, so that the standard of the profession as a whole may be sustained.

Sincerely,

ANDREW P. BIDDLE.

Detroit, July 20, 1937.

WE STAND CORRECTED

To the Editor, JOURNAL MICHIGAN STATE MEDICAL SOCIETY:

In your editorial in the June M. S. M. S. JOURNAL on "Basic Science Boards," I notice that you did not mention Minnesota. That State passed a Basic Science bill in 1925 or 1926, and its enforcement has resulted in putting many quacks out of business and preventing the licensing of numerous cultists.

F. R. WALTERS, M.D.

Battle Creek, Mich.,
July 24, 1937.

DEPARTMENT OF SOCIETY ACTIVITY

L. FERNALD FOSTER, M.D., Secretary

Council Chairman's

- - - Communication

GOLDEN ASSET

WHEN checking over your income, bonds, real estate, et cetera, do not forget to put down your most valuable assets, the *Post Graduate Opportunities* offered the graduate of medicine in Michigan.

Do you realize that Michigan is the pioneer and leader in post graduate courses in the U. S. A.?

Much credit must be given to the University of Michigan and the Medical Committee on Post Graduate Education of the Michigan State Medical Society and especially to Dr. J. D. Bruce of the University of Michigan for the efficient and progressive courses given in Michigan.

Access to these valuable courses is given the general practitioner at his very door by the regional courses; the specialist and surgeon at the University of Michigan and Wayne University.

The public (meaning your patients) demands that you keep up with progress of medicine. How better can you do this than by the Golden Asset offered you?

The Post Graduate Committee of the Michigan State Medical Society, of which Dr. J. D. Bruce is chairman, has arranged these courses so that the field of medicine will be covered in four years.

The lectures in book form have been given to you for attendance. The extra cost of printing demands that a small fee be charged this year. In future years a fee for attendance may be required.

Will you feel that the course is of more value if you pay?

The Councilors of the Michigan State Medical Society are the chairmen of the Centers where the courses are given. Their value as Councilors is judged by your attendance.

Give your Councilor your support.

Stop and think. Are you giving adequate medical service to your patients? Do you realize the public knows what adequate medical service means? By giving it you

not only increase your value, but in the end will defeat the so-called State Medicine.

Post graduate work makes you adequate.

Value this among your assets and let the public know.

P. R. URMSTON, M.D.

Chairman of the Council

THE ANNUAL SESSION

NOW is the time to plan on entering the 1937 Annual Session of the Michigan State Medical Society. Beginning with a meeting of the House of Delegates Monday, September 27, the convention will be concluded Thursday afternoon, September 30. This year's session has been designed to serve in every detail, and to the greatest advantage, the physicians of the State Society and especially the general practitioner. To accomplish that objective, a number of innovations have been established.

The established practice of holding simultaneous Section Meetings in each of the Seven Sections of the State Society has been discontinued. Too frequently under that arrangement members were unable to avail themselves of the fine papers being presented in various and widely separated halls at the same hour. This year one-half day, Tuesday morning, September 28, will be devoted to Section Meetings. At this session each section will present specially prepared specialty papers and elect their officers. All meetings will be general in character and will include papers covering every phase of scientific medicine, especially as it affects the general practitioner.

Over three-fourths of the thirty essayists on the program of the General Sessions will be men from outside the State of Michigan. These men will represent the finest medical minds in the country. The outstanding medical men of our own state are thoroughly appreciated, but it is felt that we can avail ourselves of their contributions from time to time throughout the year.

A Technical Exhibit, second to none, will be arranged for your enjoyment and education. Seventy-one spaces are arranged for your comfortable perusal. Only accredited products and appurtenances of the

latest accepted development will be presented. These displays can be viewed by you at various times throughout the convention with no inconvenience or sacrifice of your time from the Scientific Program.

The city of Grand Rapids, with its great Civic Auditorium, makes it possible to hold the 1937 session under one roof. There will be no meetings or clinics held at widely separated locations throughout the city. One hotel connects with the Auditorium by a tunnel, thereby enabling its guests to live under the same roof with the convention activities. Other hotels are within a stone's throw of the Auditorium.

Let's make this a banner convention. A majority of our nearly 4,000 members should plan on attending this session, combining an enjoyable vacation with a splendid intensive postgraduate course and an abundance of fine fellowship.

Make your plans now to be present at the first session and stay through the last session. When you receive your official program notice that each session is filled with headliners. Can you afford to miss this Annual Convention which has been planned throughout for your education, relaxation and advancement in all phases of modern medicine?

Remember — Grand Rapids — September 27-28-29-30, 1937.

MSMS ACTIVITIES AND PUBLIC RESPONSIBILITY INCREASING

THE influence, prestige, and scope of activities of the Michigan State Medical Society continue to increase. More and more it is becoming the center of state-wide medical activity in education and service. The advice of the State Society is being sought in many quarters where medical service plays a part. As a quasi-public institution, the Michigan State Medical Society gladly accepts these added responsibilities, and gives generously of its technical knowledge to those who seek it. The following editorial from the *Detroit Free Press* of June 25, 1937, illustrates a recent case in point:

THIS IS PRACTICAL

The joint effort to improve medical service in the Michigan prisons and among paroled persons agreed upon by the Michigan State Medical Society, the State Prison Commission and the Parole Commissioner appears to be a practical and valuable departure.

As Commissioner Gellein explains it, the medical society agrees to provide internes at the prisons, and to furnish medical care for parolees in sparsely

settled communities where their examination and treatment is now something of a problem.

Under this arrangement young physicians will get valuable practical experience, particularly in dealing with social diseases, and the prison physicians will get aides who are eager to increase their knowledge and skill and can be counted upon to give the best service that is in them.

The benefits to prisoners are of course evident.

Commissioner Gellein considers the departure the most advanced move in penology the State has taken, and there seems to be no reason to dispute his estimate.

MINUTES OF MEETING OF MATERNAL HEALTH COMMITTEE June 23, 1937

1. The meeting was called to order by Dr. Alexander M. Campbell, chairman, in the Hotel Statler, Detroit.

Members present: Dr. Campbell, Dr. W. F. Seeley, Dr. H. A. Furlong, Dr. N. F. Miller, Dr. C. E. Palmer, Miss Goddard.

Members absent: Dr. Wiley.

2. Dr. Miller reported on a letter sent to the Executive Committee of The Council, Michigan State Medical Society, on the status of obstetrical teaching material at the University of Michigan. Dr. Miller is to follow up this letter.

3. Dr. J. D. Miller has left a half hour period on the program of the Michigan State Medical Society for the work of this committee.

4. Dr. Corbus of the Joint Committee on Public Health requested a statement from the chairman on public health lectures on prenatal and obstetrical care. The Joint Public Health Committee is willing to cooperate. This committee is to arrange speakers for the lectures on obstetrical care.

5. Dr. Miller reported a conference with the Federated Women's Club—Executive Officers on Maternal Welfare.

6. Dr. Furlong is to report on stillbirths and was authorized to take this matter up with Dr. Deacon.

A preliminary report was made to the Committee on the survey conducted on obstetrical care in Michigan.

Action on report of Dr. Palmer: Dr. Miller suggested that each member of the committee have a photostatic copy for study with remarks by Dr. Palmer. New tables are to be sent out in the same manner.

The meeting adjourned to meet at the call of the chairman.

HAROLD A. FURLONG, M.D.,
Acting Secretary

MINUTES OF MEETING OF LEGISLATIVE COMMITTEE July 13, 1937

1. *Roll Call*.—The meeting was called to order by Dr. L. G. Christian, Chairman, in the East Room of the Hotel Olds, Lansing, at 7:00 p. m. Those present were Drs. Christian of Lansing; L. H. Bartemeier, Detroit; Henry Cook, Flint; Wm. A. Hyland, Grand Rapids; Philip A. Riley, Jackson; Wm. E. E. Tyson, Detroit; Paul R. Urmon, Bay City. Absent: Dr. J. W. Hawkins, Detroit; and Dr. J. B. Bradley, Eaton Rapids.

2. *Annual Report*.—The meeting was called for the purpose of drafting the annual report of the Legislative Committee for presentation to the Council and the House of Delegates of the Michigan State Medical Society. Dr. Christian gave a detailed history of the bills introduced into the 1937 Michigan Legislature which were of interest to the medical profession. The Committee developed its Annual Report and recommendations.

3. *Adjournment*.—Meeting adjourned at 10:30 p.m.

NEW LAWS THROW RESPONSIBILITY ON PHYSICIAN

TWO laws of great general interest, passed by the 1937 Michigan Legislature and signed by Governor Frank Murphy, are the prenuptial physical examination act and the law permitting teaching of social hygiene in public schools. Both of these new statutes are of particular concern to the physicians of this state as the aim of their sponsors is to eradicate syphilis and gonorrhea.

In order to obtain a marriage license, both parties to the proposed marriage shall, within fifteen days prior to making application for license to marry, submit to medical examination for the presence of venereal disease. If the physician finds no such disease, he shall issue a certificate to the examinee to that effect on a form prescribed by the State Commissioner of Health.

A total of 47,023 marriages occurred in Michigan in 1936. If this figure remains constant, the prenuptial examination law will apply to some 94,000 persons each year.

The new statute throws a grave responsibility on the medical practitioners of Michigan who in the last analysis will be charged with proper administration of the law. If the work is done fairly and reasonably, much additional credit will redound to the medical profession. If abuses are allowed to creep in, ever so slightly, it is inevitable that the law will be repealed and the profession will lose part of its priceless prestige.

The Michigan State Medical Society urges all physicians to give careful study to this law and to follow its provisions with exactness and discretion.

ANTENUPTIAL PHYSICAL EXAMINATION LAW

MICHIGAN LEGISLATURE OF 1937

Introduced by

Messrs. Hamilton, Buckley and Walsh

Bill No. 459

House Enrolled Act No. 167

AN ACT to provide for an antenuptial physical examination; to provide a penalty for the violation of the provisions of this act; and to declare the effect of this act.

The People of the State of Michigan enact:

Section 1. All persons making application for license to marry shall at any time within fifteen days prior to such application be examined as to the existence or non-existence in such person of any venereal disease, and it shall be unlawful for the county clerk of any county to issue a license to marry to any person who fails to present and file with such county clerk a certificate setting forth that such person is free from venereal diseases. In order to obtain a certificate as required in this act, both parties to a proposed marriage shall, within fifteen days prior to making application for license to marry, submit to medical examination for the presence of venereal disease. All laboratory tests required by this act shall be made by the Michigan department of health or a laboratory which is registered by the Michigan department of health. Such tests as may be made by the Michigan department of health shall be free of charge. Laboratory tests shall include a Kahn test for syphilis, a dark field test where indicated and a microscopic test for gonococci when indicated, the specimens for which shall be submitted in the manner prescribed by the state commissioner of health. If, on the basis of negative laboratory and clinical findings, the physician in attendance finds no evidence of venereal disease, he shall issue a certificate to the examinee to that effect on a form prescribed by the Michigan commissioner of health. Such certificates of negative findings as to each of the parties to a proposed marriage shall be filed with the county clerk at the time application for a license to marry is made.

Sec. 2. Any county clerk who shall unlawfully issue a license to marry to any person who fails to present and file a certificate as required in this act, or any party or parties having knowledge of any matter relating or pertaining to the examination of any applicant for license to marry or clinical and laboratory tests taken by any party to a proposed marriage, who shall disclose the same, or any portion thereof, except as may be required by law, shall be guilty of a misdemeanor, and upon conviction thereof shall be punished as provided by the laws of this state.

Sec. 3. Any physician who shall knowingly and wilfully make any false statement in any certificate given by such physician under this act shall be guilty of a misdemeanor, and upon conviction thereof shall be punished as provided by the laws of this state.

Sec. 4. Any person who shall violate any of the provisions of this act, for which a penalty is not specifically provided, shall be guilty of a misdemeanor, and upon conviction shall be punished as provided by the laws of this state.

T. THOMAS THATCHER,

Clerk of the House of Representatives.

FRED I. CHASE,

Secretary of the Senate.

Approved

FRANK MURPHY,
Governor.

SOCIETY ACTIVITY

TEACHING SOCIAL HYGIENE IN PUBLIC SCHOOLS

MICHIGAN LEGISLATURE OF 1937

Introduced by
Mrs. Belen

Bill No. 520
House Enrolled Act No. 180

AN ACT to amend section two of chapter twenty of part two of act number three hundred nineteen of the public acts of nineteen hundred twenty-seven, entitled "An act to provide a system of public instruction and primary schools; to provide for the classification, organization, regulation and maintenance of schools and school districts; to prescribe their rights, powers, duties and privileges; to prescribe penalties for violations of the provisions of this act; and to repeal all acts inconsistent herewith," being section seven thousand five hundred sixty-three of the compiled laws of nineteen hundred twenty-nine.

The People of the State of Michigan enact:

Section 1. Section two of chapter twenty of part two of act number three hundred nineteen of the public acts of nineteen hundred twenty-seven, entitled "An act to provide a system of public instruction and primary schools; to provide for the classification, organization, regulation and maintenance of schools and school districts; to prescribe their rights, powers, duties and privileges; to prescribe penalties for violations of the provisions of this act; and to repeal all acts inconsistent herewith," being section seven thousand five hundred sixty-three of the compiled laws of nineteen hundred twenty-nine, is hereby amended to read as follows:

PART II.

CHAPTER XX.

Sec. 2. It shall be the duty of boards of education in all school districts having a population of more than three thousand to engage competent instructors of physical education and to provide the necessary place and equipment for instruction and training in health and physical education; and other school boards may make such provision: *Provided*, That nothing in this chapter shall be construed or operate to authorize compulsory physical examination or compulsory medical treatment of school children. The board of education of any school district may provide for the teaching of health and physical education and kindred subjects in the public schools of the said districts by qualified instructors having a degree from a school of medicine, public health or nursing: *Provided, however*, That it is not the intention or purpose of this act to give the right of instruction in birth control, and it is hereby expressly prohibited to any person to offer or give any instruction in said subject of birth control or offer any advice or information with respect to said subject: *Provided further*, That any child upon the written request of parent or guardian, shall be excused from attending classes in which the subject of sex hygiene is under discussion and no penalties as to credits or graduation shall result therefrom.

This act is ordered to take immediate effect.

T. THOMAS THATCHER,
Clerk of the House of Representatives.
FRED I. CHASE,
Secretary of the Senate.

Approved
FRANK MURPHY,
Governor.

INAUGURATE SOCIAL HYGIENE LECTURES IN YOUR SCHOOLS

The Belen Act is another important step in the medical profession's drive against syphilis and gonorrhea. The new law permits the teaching of social hygiene in public schools by *physicians*. Officers of county medical societies should contact their school boards and school superintendents *at once* regarding the advantages of inaugurating such courses in the schools beginning in September.

The experience of county medical societies which have been sponsoring lectures on social hygiene in public schools during the past few years, as well as an outline of the lecture course, may be procured by writing the Executive Office of the Michigan State Medical Society, 2020 Olds Tower, Lansing.

The law was given immediate effect by the Legislature, in order that courses of lectures could be inaugurated with the opening of schools this autumn. Doctor, this is the responsibility of your county medical society to act NOW.

HEAR THE PARRAN LECTURE

"THE CONTROL OF SYPHILIS IN AMERICA"

Civic Auditorium, Grand Rapids, Wednesday, September 29, 1937, 8:00 P. M.

(In connection with Annual Meeting of the M.S.M.S.)

FOR PHYSICIANS AND THEIR PATIENTS

\$20,000,000 ANNUALLY FOR OLD AGE ASSISTANCE IN MICHIGAN

THE 1937 Legislature amended the Michigan Old Age Pension Law principally by reducing the age limit from 70 to 65 years and by appropriating \$10,000,000 from funds of the State of Michigan, to be matched by Federal funds, to cover the increased load. The Act was signed by the Governor on July 22nd.

The present case load in Michigan, at 70 years of age, is 36,000 persons (not families) who have been receiving from \$4 to \$30 per month. The present average grant is \$17.15 per month (based on a state appropriation of \$4,000,000 per annum, matched by Federal funds).

The approximate load in future, at 65 years of age, will be from 60,000 to 65,000 persons (not families). The average grant, it is estimated, will eventually be \$22 per month (based on the state appropriation of \$10,000,000 per annum, matched by Federal funds).

The revised act provides that the amount of assistance rendered an individual shall not exceed a total of \$30 a month. A large percentage of old age recipients in the urban centers of Michigan now receive the maximum sum.

Supplying emergency medical care to recipients of grants under the Old Age Assistance Bureau has been a big problem, especially in the cities. In the past it has been obtained from the ERA (which issues "Medical Only" cards to some old age pensioners); from county sources, mainly for hospitalization; and through the private charity of physicians.

The Michigan State Medical Society has been working on this problem and hopes that a solution will result from the deliberations of its Committee on Medical Economics. Welfare is still operating under the old plan, and will continue to do so until January 1, 1938, when the new Michigan organization goes into operation; the county administration will begin as of March 1, 1938. In the meantime, the whole medical welfare problem, including the rendering of emergency service to old age pensioners, is being analyzed by the State Society so that a workable program satisfactory to all can be presented to the Department of Public Assistance for development with the new system.

The revised Old Age Pension Law follows:

MICHIGAN LEGISLATURE OF 1937

Senate Bill No. 115

Introduced by Senators Brooks and Brake

Senate Enrolled Act No. 97

AN ACT to amend the title and sections one, three, nine, ten, eleven, thirteen, fourteen, fifteen, seventeen, eighteen, nineteen, twenty, twenty-one, twenty-two, twenty-three, twenty-five, twenty-six, twenty-seven, twenty-eight, twenty-nine, thirty-one, thirty-two and thirty-three of act number one hundred fifty-nine of the public acts of nineteen hundred thirty-five, entitled "An act to provide for the protection, welfare and assistance of aged persons in need and residents of the state of Michigan; to create within the state welfare department a bureau to be known as the old age assistance bureau to be under the supervision of the director of the state welfare department; to create county old age assistance boards; to prescribe penalties for the violation of the provisions of this act; to provide for the disposition of the moneys raised under the provisions of act number two hundred thirty-seven of the public acts of nineteen hundred thirty-three, and to repeal act number two hundred thirty-seven of the public acts of nineteen hundred thirty-three," to add one new section to said act to stand as section forty thereof; and to repeal sections two, four, five, six, twelve, sixteen and thirty of said act.

The People of the State of Michigan enact:

Section 1. The title and sections one, three, nine, ten, eleven, thirteen, fourteen, fifteen, seventeen, eighteen, nineteen, twenty, twenty-one, twenty-two, twenty-three, twenty-five, twenty-six, twenty-seven, twenty-eight, twenty-nine, thirty-one, thirty-two, thirty-three of act number one hundred fifty-nine of the public acts of nineteen hundred thirty-five, entitled "An act to provide for the protection, welfare and assistance of aged persons in need and residents of the state of Michigan; to create within the state welfare department a bureau to be known as the old age assistance bureau to be under the supervision of the director of the state welfare department; to create county old age assistance boards; to prescribe penalties for the violation of the provisions of this act; to provide for the disposition of the moneys raised under the provisions of act number two hundred thirty-seven of the public acts of nineteen hundred thirty-three, and to repeal act number two hundred thirty-seven of the public acts of nineteen hundred thirty-three," are hereby amended, and a new section is hereby added to said act to stand as section forty thereof, said amended and added sections to read as follows:

SOCIETY ACTIVITY

TITLE

An Act to provide for the protection, welfare and assistance of aged persons in need and residents of the state of Michigan; to prescribe the powers and duties of the state department of public assistance and the several county departments of public welfare with respect thereto; to prescribe penalties for the violation of the provisions of this act; to provide for the disposition of the moneys raised under the provisions of act number two hundred thirty-seven of the public acts of nineteen hundred thirty-three, and to repeal act number two hundred thirty-seven of the public acts of nineteen hundred thirty-three; and to provide for an appropriation therefor.

Sec. 1. The administration of the provisions of this act is hereby vested in the several county departments of public welfare, under the supervision of the state department of public assistance, as herein provided.

Sec. 3. The state department of public assistance shall have power and authority to make such rules and regulations as are necessary to carry out the provisions of this act and for guiding and regulating county departments of public welfare. It shall prepare and have printed all blanks and books of record necessary, and supply each county department of public welfare with the same, to the end that a uniform system shall be employed.

Sec. 9. Old age assistance shall be granted to an applicant who:

(a) Has attained the age of sixty-five years or upwards;

(b) Has been a resident of the state of Michigan for five years out of the immediate preceding nine years, and continuously resided in the state of Michigan for a period of one year next preceding his application;

(c) Is not at the date of receiving aid, an inmate of any public institution of an eleemosynary, custodial, correctional, or curative character, except in the case of temporary medical or surgical care in a hospital;

(d) For six months or more during the ten years preceding date of application for relief, if a husband has not, without just cause, deserted his wife, or failed to support her and his children under the age of sixteen years; if a wife has not, without just cause, deserted her husband;

(e) Has not within one year preceding such application for assistance been a professional tramp or beggar;

(f) Has not divested himself or herself directly or indirectly of any property or income from property for the purpose of qualifying for assistance under this or any prior act of similar nature and has not conveyed to any person his property upon condition or agreement that such person should furnish support and maintenance, and such person to whom conveyance has been made is then living or the property conveyed is subject to performance of said conditions or agreement;

(g) Has not been convicted of a felony within five years immediately preceding his application for assistance;

(h) Is not because of his physical or mental condition in need of continual institutional care: *Provided*, That the county department of public welfare may upon due investigation pay all the assistance to such persons when properly cared for by relatives who are not legally required or themselves are unable to care for such persons;

(i) Is found upon due investigation, (1) to be unable to regularly earn an income of at least one dollar per day on account of age, infirmity, or inability to secure suitable employment, and (2) to have a net income of not to exceed one dollar per day.

Sec. 10. Old age assistance shall not be granted to a person where the value of his real estate, as determined by the assessment roll figures pro-rated on the last five-year basis, exceeds three thousand five hundred dollars, or, if married and not separated from husband or wife, if the value of his or her property together with that of such husband or wife exceeds three thousand five hundred dollars, or if personal property with the exception of household goods to the value of five hundred dollars exceeds one thousand dollars, or, if the applicant has by any conveyance, as prohibited in section nine, subdivision (f), sought to qualify himself for any assistance thereunder subsequent to January first, nineteen hundred thirty-two.

Sec. 11. The annual income of any property, which does not produce a reasonable income, shall be computed at three per cent of its value as determined by the county department of public welfare.

The property owned at the date of application for relief shall be taken as property of the applicant for the purpose of this act.

Sec. 13. No trust deed nor assignment to the state of all or any part of the real or personal property, or insurance, of an applicant for assistance shall be required as a condition to the grant of such assistance. Forthwith on the taking effect hereof, any property or insurance deeded or assigned to the state under the provisions of section thirteen of act number one hundred fifty-nine of the public acts of nineteen hundred thirty-five shall be deeded or assigned back to the owner of such property, or to his or her estate.

The attorney general, at the request of the state department of public assistance, shall take the necessary proceedings and represent and advise the state department of public assistance in respect to any matters arising under this section or act.

Sec. 14. An applicant for assistance shall deliver his claim, in writing, to the county department of public welfare of the county in which he resides in the manner and form prescribed by the state department of public assistance.

All statements in the application shall be sworn to or affirmed by the applicant setting forth that all facts are true in each material point.

SOCIETY ACTIVITY

Any person qualified for and receiving old age assistance pursuant to the provisions of this act in any county in this state who moves or is taken to another county in this state, with the approval of the state department of public assistance, shall be entitled to continue to receive old age assistance in the county to which he has moved or is taken, and the county department of public welfare of the county from which he has moved shall transfer certified copies of all necessary records relating to the person to the county department of public welfare of the county to which he has moved.

Sec. 15. Whenever an application is made for old age assistance, the said county department of public welfare shall promptly make a thorough investigation and report to the state department of public assistance in the manner prescribed by it, giving the amount of assistance, if any, allowed, and if the application be disallowed, the reasons therefor. The laws of this state providing for a fair hearing in the county department of public welfare and in the state department of public assistance shall govern appeals by applicants for or recipients of old age assistance under this act.

Sec. 17. The county department of public welfare shall issue to each applicant to whom assistance is allowed a certificate, stating the amount of each monthly installment, to be payable as the county department of public welfare shall decide. The county department of public welfare shall cause to be made due record of all such certificates allowed with the address of the recipient, and whenever payment of assistance is made effective warrants shall be drawn upon the public welfare fund, as prescribed by the laws of this state.

Sec. 18. The recipient of any old age assistance may be required, in the discretion of the county department of public welfare, to file with such county department of public welfare a report, annually or otherwise, showing the recipient's financial condition, and upon failing to file such report within thirty days after demand or notice to the recipient by registered mail, the county department of public welfare may cancel the certificate issued to such recipient and cease payment thereunder.

Sec. 19. The assistance, if allowed, shall commence on the date named in the certificate, and one check for each calendar month shall be issued on the date as set by the county department of public welfare. All assistance given under this act shall be paid directly to the applicant except as provided in section twenty-three of this act.

Sec. 20. If at any time during the continuance of an old age assistance certificate the recipient, or the wife or husband of the recipient, becomes possessed of any property or income in excess of the amount allowed by this act in respect to the amount of assistance granted, it shall be the duty of the recipient immediately to notify the county department of public welfare of the receipt and possession of any such property or income, and the county department of public welfare may either cancel such certificate or suspend the assistance or pay the amount thereof during the period of the certificate and the recipient shall have the same right of review in case of suspension or cancellation of the certificates as provided in section fifteen of this act.

Sec. 21. On the death of any person receiving old age assistance such reasonable funeral expenses for burial shall be paid such persons as the county department of public welfare shall direct: *Provided*, that such expense shall not exceed one hundred fifty dollars, and if the estate of the deceased is insufficient to defray the same.

Sec. 22. While any person receiving assistance is an inmate of any private, charitable, benevolent, or fraternal institution, assistance may be paid to such person if otherwise eligible therefor under section nine hereof: *Provided*, That the state department of public assistance has approved and that it and its agents are permitted freely to visit and inspect said institution. It shall not be lawful for the authorities of any charitable institution, receiving public moneys, to refuse admission as an inmate of such institution, or to refuse relief, on the ground that the person is receiving assistance under this act.

Sec. 23. If the person receiving assistance is, on the testimony of reputable witnesses, found incapable of taking care of himself or his property, the county department of public welfare may direct the payment of the installments of the assistance to any responsible person for his benefit, which responsible person shall reside in the same city or township as the person receiving such assistance.

Sec. 25. All assistance grants under this act shall be reconsidered from time to time, or as frequently as may be required by the state department of public assistance. After such further investigation by the county department of public welfare as the state department of public assistance may require, the amount and manner of giving the assistance may be changed, or the assistance may be withdrawn if the county department of public welfare finds that the recipient's circumstances have changed sufficiently to warrant such action. It shall be within the power of the county department of public welfare at any time to cancel and revoke assistance for cause, and it may for cause suspend payments for assistance for such periods as it may deem proper, subject to appeal by the recipient as provided in section fifteen hereof.

Sec. 26. If at any time the state department of public assistance has reason to believe that an assistance certificate has been obtained by means set forth in section twenty-seven, it shall cause a special inquiry to be made. If on inquiry it appears that the certificate was improperly obtained, the recipient of such assistance shall be served with notice of hearing before the county department of public welfare of not less than ten days, as to the cancellation or suspension of such certificate. If after such hearing it shall appear that the certificate was improperly obtained, the county department of public welfare may cancel or suspend such certificate, subject to review as hereinbefore provided.

Sec. 27. Any person who by means of wilful false statement or representation or by

SOCIETY ACTIVITY

impersonation or other fraudulent device obtains or attempts to obtain, or aids or abets any person to obtain:

(a) an assistance certificate to which he is not entitled; or
(b) a larger amount of assistance than that to which he is justly entitled; or any person who knowingly buys or aids or abets in buying or in disposal of the property of a person receiving assistance, without the consent of the county department of public welfare, shall be deemed guilty of a misdemeanor, and, upon conviction, shall be sentenced to pay a fine of not exceeding one hundred dollars, or to imprisonment for not exceeding ninety days, or both, in the discretion of the court.

Sec. 28. Any person who violates any provision of this act for which no penalty is specifically provided shall be guilty of a misdemeanor, and, upon conviction shall be sentenced to pay a fine of not exceeding one hundred dollars, or to imprisonment for not exceeding ninety days, or both, in the discretion of the court. Where a person receiving assistance is convicted of an offense under this section the county department of public welfare shall cancel the certificate.

Sec. 29. If a person receiving assistance is convicted of any crime or offense and punished by imprisonment for one month or longer, the county department of public welfare shall direct that payments shall not be made during the period of imprisonment.

Sec. 31. Within ninety days after the close of each fiscal year the state department of public assistance shall report to the governor, for the preceding year, stating:

(a) the total number of recipients;
(b) the amount paid in cash;
(c) the amount recovered from estates or recipients;
(d) the total number of applications;
(e) the number granted;
(f) the number denied;
(g) the number cancelled during the year; and
(h) such other information as the governor or state department of public assistance may deem advisable.

Sec. 32. The county department of public welfare is hereby authorized and directed to make such reports and in such detail as may be required of it by the state department of public assistance, and the state department of public assistance shall make such reports and in such detail as may be required of it, to the federal government.

Sec. 33. All methods of procedure in hearings, investigations, recording, registration, and accounting, pertaining to old age assistance under this act, shall be in accordance with the rules and regulations as laid down, from time to time, by the state department of public assistance.

Sec. 40. THERE IS HEREBY APPROPRIATED FROM THE GENERAL FUND OF THE STATE THE SUM OF TEN MILLION DOLLARS FOR THE FISCAL YEAR ENDING JUNE THIRTY, NINETEEN HUNDRED THIRTY-EIGHT, AND FOR EACH FISCAL YEAR THEREAFTER.

Section 2. Sections two, four, five, six, twelve, sixteen and thirty of act number one hundred fifty-nine of the public acts of nineteen hundred thirty-five are hereby repealed.

Section 3. In respect to the transfer of administrative duties and functions from the state welfare department, the director of the state welfare department, and the old age assistance bureau of the state welfare department to the state department of public assistance, this act shall take effect on the effective date of the act of the nineteen hundred thirty-seven legislature creating and providing for the state department of public assistance. In respect to the corresponding transfers to the county departments of public welfare, this act shall take effect on the effective date of the act of the nineteen hundred thirty-seven legislature creating and providing for county departments of public welfare. In all other respects this act shall take effect on the first day of July, nineteen hundred thirty-seven. *Provided further*, That the services of all personnel connected with the administration of the departments hereby transferred to the new department of public assistance shall be terminated with the effective date of this act.

This act is ordered to take immediate effect.

T. THOMAS THATCHER,
Clerk of the House of Representatives.

FRED I. CHASE,
Secretary of the Senate.

Approved:

FRANK MURPHY,
Governor.

SOCIETY ACTIVITY

HOUSE OF DELEGATES, MICHIGAN STATE MEDICAL SOCIETY, 1937

Names of Alternates appear in italics

Allegan

W. C. Medill, Plainwell.
E. T. Brunson, Ganges.

Alpena-Presque Isle-Alcona

F. J. O'Donnell, Alpena.
A. R. Miller, Harrisville.

Barry

Robert B. Harkness, Hastings.
H. S. Wedel, Freeport.

Bay

Roy C. Perkins, Davidson Bldg., Bay City.
M. C. Miller, Auburn.

Berrien

Wm. C. Ellet, Benton Harbor.
D. M. Richmond, St. Joseph.

Branch

R. L. Wade, Coldwater.
Samuel S. Schultz, Coldwater.

Calhoun

A. T. Hafford, Albion.
H. M. Lowe, 601 City Nat'l Bldg., Battle Creek.
Richard Stiefel, Security Bank Bldg., Battle Creek.
Wm. Dugan, Post Bldg., Battle Creek.
Harvey C. Hansen, Central Tower, Battle Creek.
Raymond D. Sleight, Security Bank Bldg., Battle Creek.

Cass

W. C. McCutcheon, Cassopolis.
S. O. Loupee, Dowagiac.

Chippewa-Mackinac

F. H. Husband, Sault Ste. Marie.
W. F. Mertaugh, Sault Ste. Marie.

Clinton

Dean W. Hart, St. Johns.
F. D. Richards, DeWitt.

Delta

W. A. LeMire, Escanaba.
None named.

Dickinson-Iron

E. M. Libby, Iron River.
W. H. Alexander, Iron Mountain.

Eaton

A. G. Sheets, Eaton Rapids.
Paul Engle, Olivet.

Genesee

Robert Scott, 1215 Detroit St., Flint.
Donald R. Brasie, 907 Citizens Bank Bldg., Flint.
F. E. Reeder, 808 Genesee Bank Bldg., Flint.
Donald Wright, 1326 S. Saginaw St., Flint.
Dale Kirk, 300 E. First St., Flint.
R. S. Halligan, 405 E. First St., Flint.

Gogebic

W. E. Tew, Bessemer.
W. H. Wacek, Ironwood.

Grand Traverse-Leelanau-Benzie

E. F. Sladek, Traverse City.
C. E. Lemen, Traverse City.

Gratiot-Isabella-Clare

Myron Becker, Edmore.
A. L. Aldrich, Ithaca.

Hillsdale

L. W. Day, Jonesville.
A. W. Strom, Hillsdale.

Houghton-Keweenaw-Baraga

J. B. Quick, Laurium.
Alfred LaBine, Houghton.

Huron-Sanilac

*D. D. McNaughton, Argyle.
None named.

Ingham

L. G. Christian, 108 E. St. Joseph St., Lansing.
C. F. DeVries, 320 Townsend St., Lansing.
R. L. Finch, 124 W. Lenawee St., Lansing.
J. F. Sander, 320 Townsend St., Lansing.
P. C. Strauss, Bauch Bldg., Lansing.
C. D. Keim, 108 E. St. Joseph St., Lansing.

Ionia-Montcalm

A. I. Laughlin, Clarksville.
Harold M. Fox, Portland.

Jackson

Philip A. Riley, 500 S. Jackson St., Jackson.
J. J. O'Meara, Peoples National Bank Bldg., Jackson.
H. A. Brown, 701 Reynolds Bldg., Jackson.
C. S. Clarke, 605 Dwight Bldg., Jackson.

Kalamazoo-Van Buren

R. G. Cook, 22 McNair Bldg., Kalamazoo.
R. J. Hubbell, 1311 American National Bank Bldg., Kalamazoo.
Chas. Ten Houten, Paw Paw.
J. G. Kingma, Decatur.
J. P. Gilding, Vicksburg.
A. E. Pullon, Kalamazoo.

Kent

A. V. Wenger, 302 Loraine Bldg., Grand Rapids.
Leon Sevey, Medical Arts Bldg., Grand Rapids.
Wm. R. Torgerson, Metz Bldg., Grand Rapids.
Carl F. Snapp, Medical Arts Bldg., Grand Rapids.
Paul Kniskern, City Hall, Grand Rapids.
Geo. H. Southwick, 55 Sheldon Ave., S. E., Grand Rapids.
O. H. Gillett, 601 Metz Bldg., Grand Rapids.
Paul Willits, Medical Arts Bldg., Grand Rapids.
Ward S. Ferguson, 6 Park Place, Grand Rapids.
John Wenger, Coopersville.

Lapeer

H. M. Best, Lapeer.
D. J. O'Brien, Lapeer.

Lenawée

A. W. Chase, Adrian.
Geo. C. Hall, Adrian.

Livingston

H. G. Huntington, Howell.
J. J. Hendron, Fowlerville.

Luce

R. E. Spinks, Newberry.
A. T. Rehn, Newberry.

Macomb

R. F. Salot, 67 Cass Avenue, Mt. Clemens.
M. C. Smith, S. Gratiot Ave., Mt. Clemens.

Manistee

E. A. Oakes, Manistee.
L. W. Sweitzer, Manistee.

Marquette-Alger

Vivian Vandeventer, Ishpeming.
R. A. Burke, Palmer.

Mason

H. B. Hoffman, Ludington.
W. S. Martin, Ludington.

Mecosta-Osceola

G. H. Yeo, Big Rapids.
Jacob Bruggema, Ezart.

* Deceased

SOCIETY ACTIVITY

Menominee

S. C. Mason, Menominee.
A. R. Peterson, Daggett.

Midland

L. V. Burkett, Midland.
Edward H. Meisel, Midland.

Monroe

D. C. Denman, Monroe.
None named.

Muskegon

E. O. Foss, Peoples Bank Bldg., Muskegon.
L. E. Holly, 876 N. Second St., Muskegon.

Newaygo

O. D. Stryker, Fremont.
None named.

Northern Michigan

Antrim, Charlevoix, Emmet and Cheboygan

W. O. Larson, Levering.
F. C. Mayne, Cheboygan.

Oakland

Ernest Bauer, Hazel Park.
C. T. Ekelund, 906 Riker Bldg., Pontiac.
None named.
None named.

Oceana

Walter M. Lemke, Shelby.
N. W. Heysett, Hart.

O.M.C.O.R.O. (Otsego-Montmorency-Crawford-Oscoda-Roscommon-Ogemaw)

C. R. Keyport, Grayling.
C. G. Clippert, Grayling.

Ontonagon

E. J. Evans, Ontonagon.
J. L. Bender, Mass.

Ottawa

A. E. Stickley, Coopersville.
D. C. Bloemendal, Zeeland.

Saginaw

L. C. Harvie, 405 Wiechmann Bldg., Saginaw.
C. E. Toshach, 333 S. Jefferson Ave., Saginaw.
O. W. Lohr, 302 S. Jefferson Ave., Saginaw.
W. J. O'Reilly, 832 Hoyt St., Saginaw.

Schoolcraft

A. R. Tucker, Manistique.
James Fyvie, Manistique.

Shiawassee

A. L. Arnold, Jr., Owosso.
None named.

St. Clair

A. L. Callery, Peoples Bank Bldg., Port Huron.
T. E. DeGurse, Marine City.

St. Joseph

R. A. Springer, Centreville.
None named.

Tuscola

O. G. Johnson, Mayville.
T. E. Hoffman, Vassar.

Washtenaw

J. A. Wessinger, 339 E. Washington, Ann Arbor.
Dean W. Myers, 317 S. State St., Ann Arbor.
John Sundwall, 1832 Vinewood Ave., Ann Arbor.
S. L. LaFever, 216 S. State St., Ann Arbor.
H. B. Britton, Ypsilanti.
Warren E. Forsythe, University Health Service, Ann Arbor.

Wayne

T. K. Gruber, Eloise Hospital, Eloise.
L. J. Hirschman, 7815 E. Jefferson Ave., Detroit.
Grover C. Penberthy, 1515 David Whitney Bldg., Detroit.

H. A. Luce, 629 David Whitney Bldg., Detroit.
J. M. Robb, 641 David Whitney Bldg., Detroit.
A. E. Catherwood, 1337 David Whitney Bldg., Detroit.

W. D. Barrett, 311 David Whitney Bldg., Detroit.
R. H. Pino, 1001 David Whitney Bldg., Detroit.
H. W. Plaggemeyer, 1701 David Whitney Bldg., Detroit.

Wm. R. Clinton, 113 Martin Place, Detroit.
Wm. J. Stapleton, Jr., 641 David Whitney Bldg., Detroit.

R. C. Jamieson, 1309 David Whitney Bldg., Detroit.

E. D. Spalding, 662 Maccabees Bldg., Detroit.
R. C. Andries, 1737 David Whitney Bldg., Detroit.

H. W. Yates, 1229 David Whitney Bldg., Detroit.
Wm. J. Cassidy, 1737 David Whitney Bldg., Detroit.

*John L. Chester, 1742 Maccabees Bldg., Detroit.
H. F. Dibble, 1313 David Whitney Bldg., Detroit.

C. E. Dutchess, c/o Parke, Davis & Co., Detroit.
A. P. Biddle, 638 David Whitney Bldg., Detroit.

J. H. Andries, 402 David Whitney Bldg., Detroit.

A. W. Blain, 2201 E. Jefferson Ave., Detroit.
C. E. Umphrey, 13331 Livernois Ave., Detroit.
P. L. Ledwidge, 1818 David Whitney Bldg., Detroit.

L. J. Garipey, 932 Maccabees Bldg., Detroit.
D. I. Sugar, 7310 Grand River Ave., Detroit.
C. K. Hasley, 1429 David Whitney Bldg., Detroit.

Earl Krieg, 1842 David Whitney Bldg., Detroit.
J. A. Hookey, 655 Fisher Bldg., Detroit.

S. W. Insley, 1302 Maccabees Bldg., Detroit.
Basil L. Connelly, 944 Maccabees Bldg., Detroit.
Wm. S. Reveno, 951 Fisher Bldg., Detroit.

C. F. Brunk, 7815 E. Jefferson Ave., Detroit.
Allan McDonald, 1340 Maccabees Bldg., Detroit.
F. W. Hartman, Henry Ford Hospital, Detroit.

B. U. Estabrook, 602 Maccabees Bldg., Detroit.
R. L. Clark, 917 Forest Ave., Detroit.
M. H. Hoffmann, Eloise Hospital, Eloise.

C. K. Valade, 1604 Eaton Tower, Detroit.
C. R. Davis, 6150 W. Fort St., Detroit.
L. J. Bailey, 510 Professional Bldg., Detroit.

S. E. Gould, 1432 Longfellow, Detroit.
E. R. Witwer, Harper Hospital, Detroit.
C. E. Simpson, 1210 Kales Bldg., Detroit.

F. J. Kilroy, Receiving Hospital, Detroit.
W. P. Woodworth, 2994 Grand Blvd., E., Detroit.

W. L. Hackett, 710 David Whitney Bldg., Detroit.

L. O. Geib, 3528 Van Dyke Ave., Detroit.
Edward Dowdle, 1044 Maccabees Bldg., Detroit.
B. I. Johnstone, 555 Fisher Bldg., Detroit.

G. L. McClellan, 1424 Maccabees Bldg., Detroit.
L. T. Henderson, 13038 E. Jefferson Ave., Detroit.

S. A. Flaherty, 6058 W. Fort St., Detroit.
W. C. C. Cole, 5140 Second Blvd., Detroit.
B. H. Priborsky, 742 Maccabees Bldg., Detroit.

L. W. Shaffer, 1305 David Whitney Bldg., Detroit.

M. Rice, 14302 Schoolcraft, Detroit.
I. S. Gellert, 1229 David Whitney Bldg., Detroit.
J. W. Hawkins, 4741 Spokane Ave., Detroit.

Don A. Cohoe, 13535 Woodward Ave., Detroit

Wexford

W. Joe Smith, Cadillac.
John Carrow, Marion.

* Deceased

YOU ARE INVITED

to attend

THE GRAND RAPIDS MEETING

of the

**Michigan State Medical Society
September 28, 29, 30, 1937**

Three Days' Intensive Postgraduate Conference
Sixty Illustrious Lecturers
Seven General Assemblies
Seven Clinical Sessions

Seventy Technical Exhibits
Golf Tournament and Entertainment
Past Presidents' Banquet
Postgraduate Refresher---Good Fellowship

PLAN NOW TO ATTEND!

COUNTY SOCIETIES

EATON COUNTY

T. WILENSKY, M.D.

Secretary

The annual meeting of the Eaton County Medical Society was held at the Carnes Tavern, Charlotte, on the evening of Thursday, June 24.

Following dinner election of officers was held as provided in the Constitution. The results were as follows: President, Dr. H. A. Moyer, Charlotte; vice president, Dr. Bert Van Ark, Eaton Rapids; secretary, Dr. T. Wilensky, Eaton Rapids; treasurer, Dr. L. G. Sevensen, Charlotte; delegate, Dr. A. G. Sheets, Eaton Rapids; alternate delegate, Dr. Paul Engle, Olivet.

It was decided that a picnic be held some time during the summer and the following committee was appointed to complete all arrangements for this annual event. Committee: Drs. B. Van Ark, Paul Engle and V. Rickerd.

The next regular meeting of the Eaton County Medical Society will be held at Charlotte on the evening of Thursday, September 30, 1937.

INGHAM COUNTY

RUSSELL HIMMELBERGER, M.D.

Secretary

DR. L. G. CHRISTIAN HONORED

The July meeting of the Ingham County Medical Society was in the form of a testimonial to Dr. L. G. Christian of Lansing, Chairman of the Legislative Committee of the Michigan State Medical Society, to honor and thank our associate for his untiring efforts as Chairman of this important committee and for his good work in leading the successful fight for the passage of a Basic Science Law in Michigan.

Dr. Robert S. Breakey offered the following resolution which was unanimously adopted.

WHEREAS a member of the Ingham County Medical Society has served with distinction and credit to our local Society in the capacity of Chairman of the Legislative Committee of the Michigan State Medical Society, and

WHEREAS, this individual, Leo Gregory Christian, has given unstintingly of his time and effort to the loss of his practice and own material income, and

WHEREAS his efforts have been crowned with the unique success in the passage of the Basic Science Law by both Houses of the Legislature and there has been accomplished a forward movement for the good of the people of the State of Michigan in the preservation of the dignity of the healing art, and

WHEREAS this success is without question due for the most part to the efforts of said Leo Gregory Christian and we as members of the Medical Society of Ingham County have benefited very directly in his efforts and indirectly for the good will focused upon our own Society throughout the medical profession of the State of Michigan, and, in fact, the country as a whole,

THEREFORE, BE IT RESOLVED, That we, the members of the Ingham County Medical Society, gratefully acknowledge Dr. Christian's devotion in the attainment of this ideal, his efforts on our own behalf as well as those of others, and we sincerely thank him for his own personal self-sacrifice throughout the past difficult period of this Chairmanship, and

FURTHER BE IT RESOLVED, That a committee be appointed for the consideration of an honorarium for Leo Gregory Christian, which may appear, after careful investigation, to be best suited in the effort which he has expended during his incumbency, and further

BE IT RESOLVED, That said committee appointed by the President be instructed to report its recommendations with the approval of the Society as a whole at the next recognized meeting of said Society, whether regular or otherwise.

AUGUST, 1937

Tiffany Watch Presented to Dr. Christian

Dr. Christian was presented with a beautiful Tiffany watch, properly inscribed, in recognition of a small portion of the credit due him for his activities in behalf of medicine and the public good.

Dr. Christian replied to various toasts by reviewing the tremendous amount of hard and constant work done by all members of the State Society to aid the passage of the Basic Science Bill. He also reported on other bills of medical interest passed by the legislature, especially the welfare laws, the occupational disease law, the prenuptial physical examination law, and the measure permitting the teaching of social hygiene in public schools.

The July issue of the bulletin was dedicated to Dr. Christian, as an expression of our appreciation for what he has done for us as physicians and members of the State Medical Society and as citizens of Lansing and the State of Michigan.

Short articles commending Dr. Christian were written by Dr. Henry E. Perry of Newberry, President of the Michigan State Medical Society; Dr. Henry Cook of Flint, president-elect, State Society; Dr. P. R. Urmston of Bay City, chairman of the Council of the State Society; Dr. Milton Shaw of Lansing, president of Ingham County Medical Society; Dr. T. K. Gruber of Eloise; Wm. J. Burns, executive secretary of the State Society; and Mrs. L. G. Christian.

MONROE COUNTY

FLORENCE AMES, M.D.

Secretary

Monroe County Medical Society held its last meeting before the summer recess, June 24, at the Monroe Country Club. This was the annual recreational meeting. The doctors' wives were guests of the society.

Some played golf in the afternoon. After a very enjoyable chicken dinner all played cards.

Dr. R. I. English, who has recently set up practice in Temperance, was elected to membership.

MUSKEGON COUNTY

L. E. HOLLY, M.D.

Secretary

Dinner meeting of the Muskegon County Medical Society was held at the Century Club, Friday, May 28, at 6:00 P. M. The meeting was called to order, following dinner, by Dr. Mandeville, President, at 7:40 P. M. Several guests were introduced. Dr. Mandeville introduced Dr. Charles Teifer, who was attending his first meeting since his accident in February.

The matter of an Exhibit at the Centennial was brought up for discussion. It was moved by Dr. Douglas and supported by Dr. William LeFevre that a committee be appointed to make arrangements for an exhibit to be held in conjunction with the three hospitals: That this committee be given power to act; that sufficient funds be voted to cover the cost of such an exhibit. This motion was discussed by Dr. Oden, Dr. George LeFevre and several others. The motion was carried unanimously.

It was moved by Dr. Holmes and supported by Dr. William LeFevre that the Medical Society ask the trustees of the Participating Association to furnish the necessary funds to the society for the financing of the Exhibit and Ad. Yes, 28; No. 4. The motion was carried.

The president appointed the following two committees:

Exhibit: Dr. Foss, chairman, Dr. Douglas, Dr. Oden, Dr. Dasler, Dr. Durham, and Dr. D'Alcorn.

For the Chronicle Centennial Edition, the Publications Committee was appointed to act. Dr. Holmes, chairman, Dr. Holly, Dr. Wm. LeFevre, Dr. Pyle, Dr. Morford.

The speaker of the evening was introduced by Dr. Douglas, Dr. W. H. Hoffman, Chicago, who spoke on "Nephritides."

Business meeting of the Muskegon County Medical Society was held at the Century Club on Monday, June 14. The meeting was called to order by President Mandeville at 9:00 P. M.

The minutes of the last meeting were read and corrected as follows: Dr. Foss, chairman of the Exhibit Committee. The other members remaining as read. Several bills were read. It was moved by Dr. Thornton and supported by Dr. Teifer that the bills be paid.

A very lengthy and detailed report of the Allied Health Committee was given by Dr. Hartwell. The report is incorporated in the minutes. This report received much free discussion and it was pointed out by Dr. Holmes that the Inter-Allied Health Committee should act to correlate general medical needs in the community. Dr. Holmes moved that we as a Society generally concur in the activities of the Allied Health Group and give them our support. Further, that we ask them to continue with their work, that the communications from this committee, which are submitted to the Society upon a favorable vote, be transmitted to the Superintendents of the two hospitals and be then referred to the respective hospital staffs for action. This was carried unanimously.

It was moved and seconded that the County Society suggest to the hospitals that no special nurse be appointed without first consulting the attending physician. The motion was carried.

There was a long and frank discussion of the venereal situation in the Muskegon County without definite recommendations or motion. The matter of a County Health Unit was proposed by Dr. Stone. Dr. Stone presented a very complete outline of the set-up for Muskegon County, exclusive of the three cities, namely, Muskegon, Muskegon Heights, and North Muskegon. It was noted in his report that the Health Officer would be an administrative officer and would not engage in the active practice of medicine. The governing body of the Health Unit would be composed of five or seven members. The five-man board would be composed of two supervisors, two physicians and they in turn to elect a fifth member who should be a layman. The seven-man board would be composed of two county supervisors, two city supervisors, two physicians, and one layman. The question of diagnostic clinics was brought up. In this discussion, it was pointed out that the power to formulate these clinics would rest with the Administrative Board. It is impossible to here give all the discussion that came up relative to the proposed County Health Unit. In order to guide the committee appointed by the president of the County Medical Society in their negotiations with the committee from the Board of Supervisors, the following several motions were made and action noted:

It was moved and seconded that the County Health Unit be county-wide and not limited to the political units outside of Muskegon, Muskegon Heights, and North Muskegon; in other words, the County Unit to include all of Muskegon County and the three cities. This was carried unanimously.

It was moved and supported that the County

Health Officer must be a physician, licensed to practice in the State of Michigan, he must become a member of and maintain his membership in the Muskegon County Medical Society. The motion was carried.

It was moved and supported that the Health Unit would not include holding diagnostic or immunization clinics but that some system of medical participation should be worked out so that the necessary procedures would be done in the family physician's office. The motion was carried.

It was moved and supported that a five-man physician board shall be appointed by the president of the Muskegon County Medical Society, one member for five years, one for four years, one for three years, one for two years, one for one year, and then each succeeding year, one man appointed for five years.

This Board shall have full control of all purely medical matters appertaining to the workings of the Health Unit. The motion was carried unanimously. The meeting adjourned at 12:00 P. M.

Vascular Collapse in Toxemia of Pregnancy

According to Fred L. Adair, Chicago, Arthur B. Hunt, Rochester, Minn., and Rupert E. Arnell, Chicago (*Journal A. M. A.*, Sept. 26, 1936), parturitional vascular collapse is a grave condition occurring typically in a rather small percentage of elderly multiparas who have been afflicted with a progressively severe nephritis in succeeding pregnancies. The incidence of this condition in their clinic was 0.2 per cent of all deliveries and 2.55 per cent of all toxemic patients. The toxemia seems to be the most important etiologic factor, with delivery definitely exciting the appearance of vascular collapse. The blood pressure and general condition of cases of severe and chronic toxemia should be watched closely for twelve hours after delivery. Equipment and personnel should be ready for prompt and effective treatment in the event of the collapse of such a patient. The mortality is high, 15.49 per cent of seventy-one cases reported. The condition is an entity deserving of recognition and further study because of its gravity and because proper treatment should reduce the mortality appreciably. The most common pathologic lesion was a chronic glomerulonephritis. The liver lesions in these cases may merit further study. Proper use of hypertonic intravenous dextrose solution forms the basis for effecting recovery from the shock. A secondary partial anuria, associated with hypotension, may require management.

CASE OF CYST OF ROUND LIGAMENT SIMULATING INGUINAL HERNIA

(Continued from page 573)

Bibliography

1. Chiari: "Ztschr. Für Hülk," 8:457, 1887.
2. Graves: Gynecology. 4th edition, p. 536.
3. Hamblen, E. C.: Large intramural cyst of the uterus, with report of a case. *Am. Jour. Obstet. and Gynec.*, 31: No. 111.
4. Kaulich and Gömöri: Endometriosis of round ligament. *Jour. Obstet. and Gynec. of British Empire.* 41: No. 1, 1934.
5. McNeil, Jean: Aberrant ovarian tissue in round ligaments of uterus. *Jour. Obstet. and Gynec. of British Empire.* 38: No. 111.
6. Sampson, John A.: Inguinal endometriosis, often reported as endometrial tissue in the groin, adenomyoma in the groin, and adenomyoma of the round ligament. *Amer. Jour. Obst. & Gynec.*, 10:462-502, 1925.
7. Von Recklinghausen: Die Adenomyome und Cystadenomyome des Uterus und Tubenwandung—ihre Abkunft von Resten des Wolffschen Körpers. Strassbourg, 1906.

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TWO HEALTH DISTRICTS ORGANIZED IN UPPER PENINSULA

Two new health districts have been organized in the Upper Peninsula, each of which will be in the form of a two-county unit. Alger and Schoolcraft counties have voted to organize a joint health department and have selected Dr. E. J. Brenner as health officer. Dr. Brenner's headquarters will be at Manistique. Ruby Burkhart and Emma Johnson will serve as public health nurses.

Ontonagon and Baraga counties will also be organized as a two-county health district according to the recent vote of their respective boards of supervisors. The organization of this new department has not yet been completed.

Schoolcraft county had previously been included in Health District No. 6 with Luce and Mackinac counties, but voted to withdraw in favor of the new two-county organization. Alger county will be provided with a full-time health department for the first time.

NURSES AWARDED SCHOLARSHIPS IN PUBLIC HEALTH

Twenty nurses have been awarded scholarships by the Michigan Department of Health for additional training in public health at the University of Michigan and Wayne University. The training of public health personnel is made possible under the maternal and child health provisions of the Social Security Act.

The following nurses have been awarded one year scholarships: Madge Bresnahan, Grand Haven; Ina M. Young, Albion; Bertha Zagers, Fremont; and Minnie Vollmart, Midland. One semester's training will be provided for Ermyl Manni, Grand Rapids; Gertrude House, Kalamazoo; Mrs. Bessie Oakes, Flint; Hilma Asikainen, Stambaugh; Isabel Quinlan, Sault Ste. Marie; Mrs. Fanny Johnson, Ironwood; Mrs. Nell F. Stewart, Cleveland; Arda Muck, Menominee; Alethea Fritz, Three Oaks; and Emma Anderson, Marquette. Department staff nurses who will receive summer training at the University of Michigan include Mabel G. Munro, Annette Fox, Grace Myers, Bertha Cooper, Anna Virtue and Nell Lemmer.

BIRTH AND DEATH REGISTRATIONS ROUTED THROUGH LOCAL HEALTH DEPARTMENTS

Five additional county health departments have been organized by the Bureau of Records and Statistics so that birth and death registrations in these counties will be routed through the local department before being sent to the Michigan Department of Health. The new system provides local health officials with more timely and first-hand information regarding the vital statistics of their communities.

The recently organized counties include Chippewa, Iron, Menominee, Van Buren and Ottawa. Ten counties already operating under the new system include Oakland, Midland, Eaton, Barry, Allegan, Branch, Saginaw, Genesee, Calhoun and Hillsdale. Under this system, the local registrar sends his birth and death registrations to the county health department by the fourth of each month, and the department may then take such information from them as may be desired before transmitting them to the State Department of Health by the tenth of

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3

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the month. The physician's part in this program remains unchanged with his registrations still being made with the local registrar.

INTERSTATE EXCHANGE OF VITAL STATISTICS

In order to maintain more accurate records of births and deaths of Michigan citizens occurring in other states, the Michigan Department of Health is actively cooperating in an interstate exchange of such records. During the past year 2,029 birth and death records were exchanged with 43 other states and the District of Columbia and Canada. Only four states, Idaho, Maine, Rhode Island and Nevada, were included among those with whom no records were exchanged.

A total of 368 births and 776 deaths of residents of other states were recorded in Michigan. Other states returned to the Michigan Department of Health records of 340 births and 545 deaths of Michigan residents. The largest number of such registrations were exchanged with the neighboring states of Ohio, Illinois, Wisconsin, Indiana and Canada.

EATON COUNTY HEALTH OFFICER RESIGNS

Dr. Joe W. Davis has resigned as health officer of the Eaton County Health Department to accept a similar position in Marion County, West Virginia, his home state. Dr. M. B. Beckett, health officer of Allegan county, will serve as acting health officer for Eaton county until Dr. Davis' successor can be selected.

MONTHLY INCIDENCE OF COMMUNICABLE DISEASE

There is little change to report in the high incidence of scarlet fever mentioned in our review in the last issue of the JOURNAL. Scarlet fever has declined in keeping with the usual seasonal trend, but the incidence is still high as compared to last year and to the five year mean. Detroit and Southeastern Michigan cases continue especially high.

Rubella also continues to be evident in certain areas and to make confusion in "diagnosis," at least on the part of parents, if not physicians.

Diphtheria likewise is relatively high. There is no evidence of any further downward trend in keeping with the years 1921 to 1934.

At this writing there is little smallpox in the state. The outbreak in Monroe has apparently completely subsided, and the few cases occurring recently have been almost entirely in Detroit.

At this time there is no indication of any significant seasonal increase in the incidence of poliomyelitis. However, the "poliomyelitis season" is close at hand and the picture may change at any time, perhaps before this issue of the JOURNAL reaches the physicians of the state. It is the season when all physicians should be sharply on the lookout for evidence of this disease.

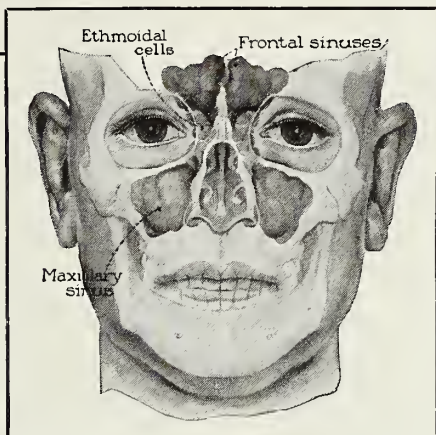
Another disease for which the season is close at hand is typhoid fever. The incidence so far this year has been low, as it was last year. So few cases of typhoid occur that many physicians now in practice have not had occasion to treat a single case, and yet it is not extinct. There were 341 cases reported for 1936, and it is for this reason that physicians may be caught unawares. Typhoid and undulant fever are always to be considered in fevers otherwise unaccounted for.

The season for diarrhea and enteritis is also approaching. The death of 467 babies under two years of age was assigned to this cause in the mortality classification for 1936. These conditions are apt to be particularly prevalent around lakes and resort areas.

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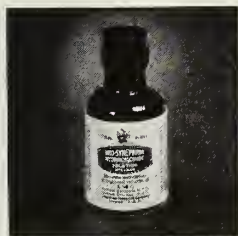


Relieves Hay Fever Congestion

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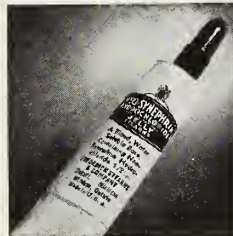
1. No sting
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3. Less toxic in therapeutic dosage than epinephrine or ephedrine
4. So stable that it may be sterilized by boiling
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NEO-SYNEPHRIN HYDROCHLORIDE EMULSION, - $\frac{1}{4}\%$ (1-oz. bottle with dropper)

NEO-SYNEPHRIN HYDROCHLORIDE SOLUTION, $\frac{1}{4}\%$ for dropper or spray;
1% for resistant cases (1-oz. bottle)

NEO-SYNEPHRIN HYDROCHLORIDE JELLY, - $\frac{1}{2}\%$ (in collapsible tubes with applicator)

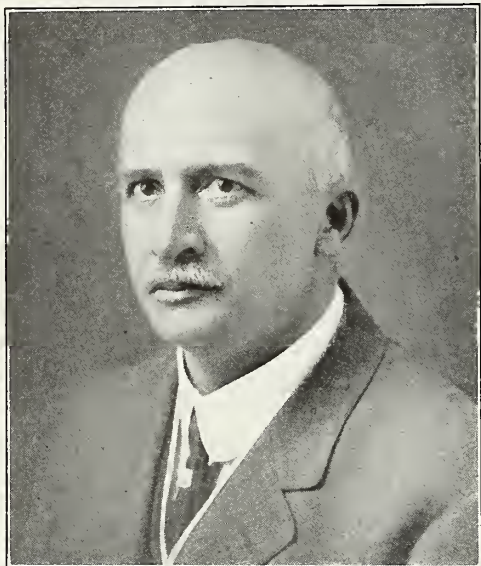
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IN MEMORIAM

Dr. Harry M. Joy

Dr. Harry M. Joy, veteran physician and surgeon of Calumet, Michigan, for forty-odd years, died suddenly May 15, of a heart attack at his apartment. Dr. Joy, born in 1869 in Grand Rapids, graduated



from the University of Michigan Medical School in 1892. He practiced for a few years in the southern part of the state, coming to Calumet a few years later. He was loved and respected by patients and colleagues. A talented and skillful surgeon, he gave unsparingly of his time and knowledge. He served organized medicine as chairman of the Public Relations Committee of the Houghton County Medical Society, and was keenly interested in all questions or matters affecting the public welfare.

Dr. Joy served in the war as a Major of the Medical Reserve Corps, and was a member of the American Legion. He was a past president of the Houghton County Medical Society, and vice president of the Upper Peninsula Medical Society. He had served as a member of the Michigan State Board of Medical Examiners, and was a Fellow of the American College of Surgeons.

At the time of his death, he was Chief-of-Staff of Memorial Hospital, Laurium, devoting time and energy without stint to its affairs.

Dr. Julius H. Powers

Dr. Julius H. Powers of Saginaw died at his home on Monday, July 19, after an illness of nearly two years. Dr. Powers was born in New Hampton, Iowa, fifty-seven years ago. After a preliminary education in Iowa, he attended and was graduated from Grinnell College, Iowa, where he later served two years as instructor in Biology. Subsequently he attended the University of Michigan, where he graduated in 1906 from the University of Michigan Medical School. Following his graduation he located in Saginaw, where he was engaged up to the time of his illness. Dr. Powers served in the medical corps during the World War. He had always taken an active part in medical affairs. He was president

of the Saginaw County Medical Society in 1917, and for eleven years he was councillor of the eighth councillor district of the Michigan State Medical Society, during which time he was also chairman of the council. Dr. Powers was a member of the



Society of Michigan Industrial Surgeons and also a Fellow of the American College of Surgeons. He is survived by his wife; one son, Robert F. Powers; a daughter, Mrs. Daniel C. Bixby; and a brother, Edwin H. Powers.

Dr. Duncan A. Cameron

The Michigan House of Representatives, in session on Monday, June 21, 1937, adopted the following resolution to the memory of the late Dr. Duncan A. Cameron of Alpena:

"WHEREAS, Dr. Cameron found it impossible to retire due to the many calls and demands for aid and assistance, all of which he met, regardless of sacrifice to himself; and

"WHEREAS, The influence of Dr. Cameron, through the instilling of ideals and an example in the minds of the young people of Alpena, will live as a part of the tradition of the community; and

"WHEREAS, Dr. Cameron's service to his profession in Alpena County, in the Michigan Medical Society, in the American Medical Society and for sixteen years as a member of the State Medical Board of Registration, will live in the memory of the men who have had the privilege of serving and working with him; and

"WHEREAS, His work in Masonry and the fellowship of his fellow masons, will long be remembered; and

"WHEREAS, In the 1933 session of the legislature, Dr. Cameron earned the respect and confidence of his fellow colleagues; and

"WHEREAS, Dr. Cameron was a prominent member of the Alpena Aerie, F.O.E., in which organization he rendered great service; now, therefore be it

"RESOLVED by the House of Representatives, That the members of the House express their sorrow and grief on the death of Dr. Duncan A. Cameron; and be it further

"RESOLVED, That a copy of this resolution be transmitted to the family."



Pure refreshment

The Test of Time

We have been making the Baumanometer now for some twenty-one years, which is a long while to devote exclusively to the making of *any* one thing. And in all of that time our work has never deviated from these three principles:

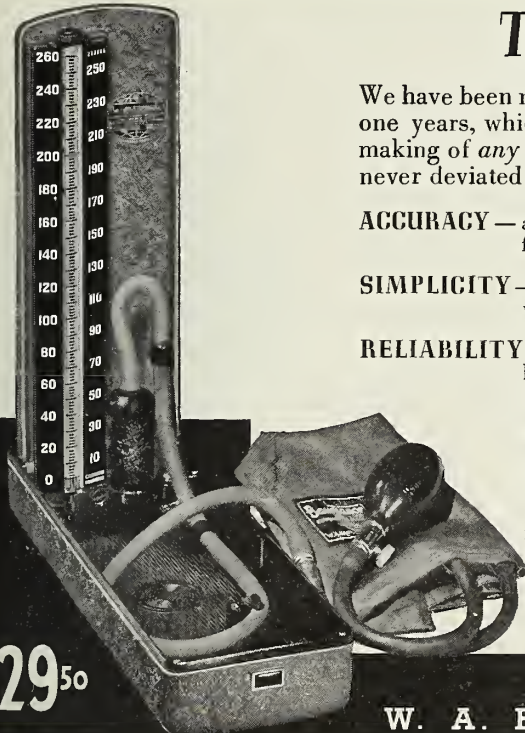
ACCURACY — above all else, the rock upon which the Baumanometer first won the medical profession's confidence.

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The One Hundred Per Cent Club of the Michigan State Medical Society:

1. Alpena County Medical Society.
2. Branch County Medical Society.
3. Cass County Medical Society.
4. Clinton County Medical Society.
5. Eaton County Medical Society.
6. Gogebic County Medical Society.
7. Ingham County Medical Society.
8. Jackson County Medical Society.
9. Lapeer County Medical Society.
10. Lenawee County Medical Society.
11. Livingston County Medical Society.
12. Luce County Medical Society.
13. Manistee County Medical Society.
14. Menominee County Medical Society.
15. Muskegon County Medical Society.
16. Newaygo County Medical Society.
17. Northern Michigan Medical Society.
18. Oceana County Medical Society.
19. Ontonagon County Medical Society.
20. Schoolcraft County Medical Society.
21. Shiawassee County Medical Society.
22. Tuscola County Medical Society.

The above County Medical Societies have paid dues in full for each and every member of the County and State Medical Society. A number of other County Societies lack but a few, sometimes only one or two, of being One Hundred Per Cent. Have YOU paid your dues?

COUNCIL AND COMMITTEE MEETINGS

1. July 29, 1937—Executive Committee of The Council—Durant Hotel, Flint—3:00 P. M.
2. July 29, 1937—Committee on Scientific Work—Durant Hotel, Flint—6:00 P. M.
3. August 11, 1937—The Council—Baldwin, Mich.—2:00 P. M.

* * *

Dr. George G. Stilwell of Detroit addressed the Federation of Women's Clubs at Lapeer on June 3. His subject was "Cancer."

* * *

Dr. and Mrs. C. E. Simpson of Detroit sailed Monday, May 31, for England, where they plan an extensive motor trip and also expect to visit the continent, touching Austria, Germany and France. They will return to Detroit the latter part of August.

* * *

Dr. L. A. Harris of Gaylord was the honored guest of the O.M.C.O.R.O. Medical Society at a meeting held at the hunting and fishing camp of Dr. C. G. Saunders of Gaylord, on the Main Black River, July 15. Dr. Harris has been in practice fifty-three years, fifty-one of which were spent in Otsego County.

* * *

Wayne County Medical Society's Eighth Annual Golf Tournament will be held at the Oakland Hills Golf and Country Club on Wednesday, August 18. This event usually attracts about 250 golfers, and is a splendid social gathering of medical men. The Oakland Hills Club is the scene of the recent National Open Tournament.

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Dr. J. H. J. Upham of Columbus, Ohio, president of the American Medical Association, will bring greetings from the A.M.A. to members of the Michigan State Medical Society on September 28, 1937, at the First General Assembly of the 72nd Annual Convention. It is a rare treat to hear Doctor Upham speak. Don't miss it!

* * *

"What the County Medical Society Means to the Community" was the title of an address by Mr. Wm. J. Burns, executive secretary of the Michigan State Medical Society, delivered before the Rotary Club of Battle Creek on July 26, at the Post Tavern. "What the Michigan State Medical Society is Doing" was the subject of an address by Mr. Burns to the Mecosta-Osceola County Medical Society on August 10, at the Western Hotel in Big Rapids.

* * *

Grand Rapids hotel reservations should be secured immediately for the M.S.M.S. Annual Convention, September 27 to 30, in order to avoid disappointments later. You will want to be sure to stay for the entire session this year. The program of the Seven General Assemblies is varied and interesting, with twenty-eight speakers, all of national prominence, coming from all parts of the United States. You cannot afford to miss this outstanding postgraduate opportunity.

* * *

The Berrien and Cass County Medical Society cooperate in issuing a monthly bulletin to their membership containing the program of meetings, minutes of previous meetings, a message from the president, and other pertinent information of value and interest to the membership. Dr. A. F. Bliesmer, secretary of the Berrien County Medical Society, is editor of the Bulletin. Congratulations, Berrien

and Cass County Medical Societies! Your Bulletin is worthy of emulation.

* * *

Dr. O. A. Brines of Detroit, chairman of the Cancer Committee of the Michigan State Medical Society, is making a tour of the Upper Peninsula in September giving lectures on "Cancer" to nearly all of the county medical societies located in the Upper Peninsula. Doctor Brines' itinerary is as follows:

September 20, 1937 (noon)	.....	Escanaba
September 20, 1937 (night)	.....	Iron Mountain
September 21	.....	Houghton
September 22	.....	Ironwood
September 23	.....	Marquette
September 24 (noon)	.....	Newberry
September 24 (night)	.....	Sault Ste. Marie

* * *

By Badge Only! Admissions to the General Assemblies of the 72nd Annual Meeting of the Michigan State Medical Society, Civic Auditorium, Grand Rapids, September 28 to 30, will be by badge only.

This ruling is made to protect members of the Michigan State Medical Society, who otherwise might be crowded out by others who wish to attend the various functions of the meeting. Be sure to register immediately upon arrival and secure your badge.

* * *

The Upper Peninsula Medical Society will hold its 1937 Annual Meeting in Houghton, Michigan, August 19 and 20. Thursday morning will be devoted to a discussion of the economics of medicine in charge of officers of the State Society. Many worthwhile scientific papers are planned which will make this annual postgraduate meeting outstanding. All members of the Michigan State Medical Society are cordially invited to attend. (For a copy of the program, see page 430 of your JOURNAL for June, 1937.)

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Outstanding physicians scheduled to appear on the program of the 72nd Annual Convention of the Michigan State Medical Society to be held in Grand Rapids Civic Auditorium, September 27 to 30, are Dr. Maxwell J. Lick of Erie, Pa., president of the Pennsylvania State Medical Association; Dr. Elliott P. Joslin of Harvard University Medical School, Boston, who will deliver the Andrew P. Biddle Oration; Dr. Thomas Parran, Jr., Surgeon General of the U. S. Public Health Service; Dr. J. H. J. Upham, president of the American Medical Association. Be sure to hear these men!

* * *

Crippled and Afflicted Child Commitments for June, 1937:

Crippled child: Total of 216. Of the total number, 84 went to University Hospital; and 132 went to miscellaneous hospitals. From Wayne County (included in above totals): Total cases, 53. Of the fifty-three cases in Wayne County, 3 went to University Hospital, and 50 went to miscellaneous hospitals.

Afflicted child: Total of 1,309 cases, of which 272 went to University Hospital, and 1,037 went to miscellaneous hospitals. From Wayne County (included in above totals): Total cases, 472. Of the 472 cases in Wayne County, 74 went to University Hospital and 398 went to miscellaneous hospitals.

* * *

Government aid during the depression was given to about 82,000 professional and technical workers, according to Harry L. Hopkins in his report of the Works Progress Administration. In this group of 82,000 were over 20,000 teachers, 15,000 musicians and music teachers, 6,800 nurses, 6,200 engineers, 4,500 draftsmen, 3,800 actors, 3,000 clergymen and religious workers, 2,900 artists, 800 chemists, assayists and metallurgists, 1,400 reporters and editors and 675 physicians, surgeons and dentists.

One of the arguments of the proponents of compulsory health insurance or state medicine is the economic security to be obtained by physicians akin to that of the teacher, if state medicine becomes a fact. The above figures seem to belie this argument.

* * *

"State Society Meetings" will be held in all of the county medical societies of the Upper Peninsula during August. Officers and councilors of the Michigan State Medical Society are making a tour of the Upper Peninsula, the tentative itinerary of which is as follows:

Monday evening, August 16—Chippewa-Mackinac at Sault Ste. Marie.
Tuesday evening, August 17—Luce and Schoolcraft at Blaney.
Wednesday noon, August 18—Marquette-Alger at Marquette.
Thursday, August 19, and Friday, August 20—Upper Peninsula Medical Society Annual Meeting at Houghton.
Monday noon, August 23—Ontonagon at Ontonagon.
Monday evening, August 23—Gogebic at Ironwood.
Tuesday evening, August 24—Dickinson-Iron at Crystal Falls.
Wednesday noon, August 25—Menominee at Menominee.
Wednesday evening, August 25—Delta at Escanaba.

Officers making the tour include: President, Henry E. Perry of Newberry; President-elect, Henry Cook of Flint; Secretary, L. Fernald Foster of Bay City; Chairman of The Council, P. R. Urnston of Bay City; and Executive Secretary, Wm. J. Burns. Others who will make part of the trip are: Councilors, F. C. Bandy of Sault Ste. Marie, W. A. Manthei of Lake Linden and Roy H. Holmes of Muskegon; Chairman of the State Society Legislative Committee, L. G. Christian of Lansing; Past President Grover C. Penberthy of Detroit and Delegate to A.M.A., Louis J. Hirschman, of Detroit.

Your friends—the Technical Exhibitors at our Annual Meeting—make a real contribution to your State Society. They support us by covering the expenses of very ambitious and costly conventions; truly they deserve our support.

As of July 24, fifty-four (54) firms had contracted for expensive space in the 1937 exhibition at Grand Rapids:

Name of Firm	City	Booth Number
A. S. Aloe Company	St. Louis, Mo.	A-2
American Seating Company	Grand Rapids, Mich.	F-6
Arlington Chemical Co.	Yonkers, N. Y.	D-8
Bard-Parker Company, Inc.	Danbury, Conn.	B-4
The Borden Sales Co., Inc.	New York City	A-4
Burroughs Wellcome & Company, Inc.	New York City	E-3
S. H. Camp Company	Jackson, Mich.	B-10
Coca-Cola Company	Atlanta, Ga.	B-1
R. B. Davis Sales Corp.	Hoboken, N. J.	E-2
Detroit Branch, American Pharmaceutical Assoc.	Detroit, Mich.	D-2
Detroit X-Ray Sales Co.	Detroit, Mich.	E-8
The Doak Company	Cleveland, Ohio	E-6
The Ediphone Company	Detroit & Grand Rapids	C-8
H. G. Fischer & Company	Chicago, Ill.	A-8 and A-9
General Electric X-Ray Corp.	Chicago, Ill.	F-8
Gerber Food Products	Fremont, Mich.	B-3
Hack Shoe Company	Detroit, Mich.	G-2
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Dr. Wm. S. Gonne is a graduate of the University of Michigan Medical School, 1917. He is instructor in clinical otology in the medical department of Wayne University and Director of the department of otology and bronchoscopy, Children's Hospital. He is assistant surgeon, Harper Hospital, also a member of the staff of Woman's Hospital and consultant to the Michigan Mutual Hospital.

* * *

Dr. Carey P. McCord graduated in medicine, 1912, at the University of Michigan. His medical work is limited to occupational diseases and industrial hygiene. He is consultant to a large number of America's industries and industrial associations. His chief current activities in Michigan are as Director of the Bureau of Industrial Hygiene, City of Detroit, and advisor on occupational diseases to the Chrysler Corporation, Detroit.

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* * *

Dr. Max H. Skolnick is a graduate of the University of Michigan Medical School, 1932. He limits his practice to internal medicine.

* * *

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Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

SYNOPSIS OF DIGESTIVE DISEASES. By John L. Kantor, Ph.D., M.D. Associate in Medicine, Columbia University; Gastroenterologist and Associate Roentgenologist, Montefiore Hospital for Chronic Diseases, New York. Illustrated, St. Louis. The C. V. Mosby Company. 1937.

While the subject matter in a work of this type must, of necessity, be much abridged, the author has presented clearly and concisely the essential facts concerning the diseases of the digestive system.

THE TREATMENT OF DIABETES MELLITUS. By Elliott P. Joslin, M.D. (Harvard), M.A. (Yale). Medical Director, George F. Baker Clinic, New England Deaconess Hospital; Clinical Professor of Medicine, Harvard Medical School; Consulting Physician, Boston City Hospital. With the cooperation of Howard F. Root, M.D. Physician, New England Deaconess Hospital; Instructor in Medicine, Harvard Medical School; Priscilla White, M.D. Physician, New England Deaconess Hospital; Instructor in Pediatrics, Tufts College Medical School. Sixth Edition, Thoroughly Revised. Illustrated. Lea & Febiger. Philadelphia. 1937.

Much that is found in this work was found in the previous edition. The author states that protamine insulin necessitated the revision of this work. He expresses praise of the use of protamine insulin, and prophesies a new era in the treatment of diabetes with it and other insulin compounds, not yet developed, yet he sounds a warning to those inclined to its use and says that regular insulin must yet be depended upon in many cases.

SYNOPSIS OF GYNECOLOGY. Based on the textbook, "Diseases of Women," by Harry Sturgeon Crossen, M.D., F.A.C.S. Professor Emeritus of Clinical Gynecology, Washington University School of Medicine; Gynecologist to the Barnes Hospital, St. Louis Maternity Hospital, and St. Luke's Hospital; Consulting Gynecologist to De Paul Hospital and the Jewish Hospital; Fellow of the American Gynecological Society and of the Central Association of Obstetricians and Gynecologists; and Robert James Crossen, M.D., Assistant Professor of Clinical Gynecology and Obstetrics, Washington University School of Medicine; Assistant Gynecologist and Obstetrician to the Barnes Hospital and the St. Louis Maternity Hospital; Gynecologist to St. Luke's Hospital and to De Paul Hospital; Fellow of the Central Association of Obstetricians and Gynecologists. Second Edition. St. Louis. The C. V. Mosby Company. 1937.

The author presents the general principles and salient features of gynecology in a concise form, more particularly for those not desiring the detailed descriptions found in a complete work on the subject, but for those who desire general knowledge of the subject.

TEXTBOOK OF DIAGNOSTIC ROENTGENOLOGY, by Lewis J. Friedman, M.D., Director Roentgen Ray Department, Bellevue Hospital; Instructor in Radiology, New York University College of Medicine. 638 Illustrations, 623 Pages. New York and London: D. Appleton-Century Company, Incorporated, 1937.

This is in a real sense a textbook. The author begins at the beginning by discussing such subjects as electricity, x-ray physics, fluoroscopy and radiography, and radiographic accessories such as intensifying screens, the Bucky diaphragm, cassettes and cones. The student after reading these chapters will have his questions on such subjects all answered. A chapter deals with the osseous system from the radiographic viewpoint, that is, the viewpoint of relative densities. Fractures and dis-

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locations as well as diseases of bones and joints are dealt with adequately. Part III is concerned with the various systems of the body in much the same way as a good text on the practice of medicine would treat the diagnostic phases of these systems. The verbal descriptions are clear, as brief as necessary and to the point. Another commendable feature consists of the illustrations which are largely original and produced especially for this work. For a single volume on diagnostic roentgenology, the book is highly commended. Though young in years, roentgenology has to its credit a vast literature with which the author has shown an intimate acquaintance. For fuller treatment of the various subjects, the reader is supplied with appropriate bibliographies.

PREOPERATIVE AND POSTOPERATIVE TREATMENT.

By Robert L. Mason, A.B., M.D., F.A.C.S. Assistant in Surgery at the Massachusetts General Hospital. Illustrated. Philadelphia and London. W. B. Saunders Company. 1937.

This book presents a detailed consideration of the preparation and after-care of the surgical patient. Feeling that the surgeon is primarily a good physician, the author appreciates that the surgeon must have the coöperation of all fields of medical endeavor. He has consequently invoked the aid of men with special fields of interest in writing the book. The book is well written and covers its fields.

THE TECHNIC OF LOCAL ANESTHESIA.

By Arthur E. Hertzler, A.M., M.D., Ph.D., LL.D., F.A.C.S. Professor of Surgery in the University of Kansas; Surgeon to The Halstead Hospital, Halstead, Kansas; to St. Luke's Hospital and St. Mary's Hospital, Kansas City, Missouri; and to the Providence Hospital, Kansas City, Kansas. Sixth Edition. St. Louis. The C. V. Mosby Company. 1937.

Herein the author has discussed the indications for local anesthesia, the technic of its administration and solutions used, including those more recently coming into use. He gives detailed instructions in its use in various locations of the body and illustrates its use with many drawings and photographs. There is a chapter on spinal and sacral anesthesia.

THE LARYNX AND ITS DISEASES.

By Chevalier Jackson, M.D., Sc.D., LL.D., F.A.C.S. Professor of Bronchoscöpy and Esophagoscöpy, Temple University, Philadelphia, and Chevalier L. Jackson, A.B., M.D., M.Sc. (Med.), F.A.C.S. Professor of Clinical Bronchoscöpy and Esophagoscöpy, Temple University, Philadelphia. With two hundred and twenty-one illustrations, including eleven plates in color. Philadelphia and London. W. B. Saunders Company. 1937.

It is probable that few authors are more capable of writing a book on diseases of the larynx than are the authors of this book. While much in the work is intended for the laryngologist, the authors have called the attention of the general practitioner, the pediatricist, and the dermatologist to laryngological effects of disease processes in other parts of the body. For the specialist in this field, this book should prove invaluable. There are many colored drawings that will be of assistance to those who wish to use the laryngoscöpe.

NEW AND NONOFFICIAL REMEDIES, 1937.

Containing Descriptions of the Articles Which Stand Accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1937. Cloth. Price, \$1.50. Pp. 557, LXIV. Chicago: American Medical Association, 1937.

The annual editions of this volume contain all that the busy physician needs to know concerning

the newer preparations which he is daily importuned by the detail men of the pharmaceutical manufacturers to use. The remedies listed and described here have been examined and found acceptable by the Council on Pharmacy and Chemistry, the deliberative body charged by the American Medical Association with the performance of this service for the practitioner, who has not the time or means to make the determinations for himself.

Some new drugs have been added in the 1937 edition, the descriptions of which will be found in the groupings to which they belong. There are some noteworthy changes in classification. The various vasco-constrictors, Benzedrine, Ephedrine, Epinephrine and Neo-Synephrin, have been grouped together as phenylalkylamine derivatives under the heading "Epinephrine and Related Preparations." This terminology is in keeping with the Council's policy of avoiding therapeutically suggestive names. Another similar change is the abandonment of the classification "Medicinal Foods" and substitution of a chapter under the title "Vitamins and Vitamin Preparations for Therapeutic and Prophylactic Use" in the previous edition. The consideration of other classes of food preparations was long ago transferred to the Council on Foods. The chapter "Organs of Animals" which has heretofore included only endocrine preparations has been expanded by transfers to this heading of the chapters Liver and Stomach Preparations, and Insulin.

The book contains general articles, descriptive of the classification under which the various drugs are listed. According to the preface, more or less thoroughgoing revisions have been made of the articles: Arsenic Compounds; Compounds Containing Trivalent Arsenic; Compounds Containing Pentavalent Arsenic; Bismuth Compounds; Epinephrine and Related Preparations; Iodine Compounds; Iodine Compounds for Systemic Use; Mercury and Mercury Compounds; Pituitary Gland; Salicylic Acid Compounds; Serums and Vaccines; Antipneumococcic Serums; Silver Preparations; Tannic Acid Derivatives.

ANNUAL REPRINTS OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY of the American Medical Association for 1936, with the Comments That Have Appeared in the JOURNAL. Cloth. Price, \$1. Pp. 104. Chicago: American Medical Association.

This book is essentially a record of the negative actions of that distinguished body, the Council on Pharmacy and Chemistry of the American Medical Association; that is, it sets forth the findings concerning medicinal preparations which the Council has voted to be unacceptable for recognition and use by the medical profession. Many of the reports record outright rejection or the rescinding of previous acceptances; others report in a preliminary way on products which appear to have promise but are not yet sufficiently tested or controlled to be ready for general use by the profession.

Among the reports on out-and-out unacceptable products are Amend's Solution and the "Igol" products, iodine preparations marked under misleading or unacceptable claims, the latter under an uninformative proprietary name; Androstine-Ciba, claimed to be a testicular extract and found to be an irrational combination of inactive preparations, marketed with unwarranted and misleading claims; Gadoment, a preparation of cod liver oil in a wax base with zinc oxide benzoïn and phenol, proposed for use in the treatment of burns, cuts and minor skin irritations, found unacceptable as being an unoriginal product of insufficiently declared composition marketed under a coined proprietary name with un-

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warranted therapeutic claims, and indirectly advertised to the public; the "Carasyl" preparations which are essentially mixtures of psyllium flour, karaya gum and fig flour, marketed with unsubstantiated therapeutic claims under a proprietary name.

In 1934 the Council sponsored an exhaustive report on bacteriophage therapy which pointed out that in view of the present status of knowledge, no such preparations could be accepted for New and Nonofficial Remedies. In this volume of the collected Council reports the Council declares the "Phagoid" preparations, a line of bacteriophage products, definitely unacceptable because they are offered to the medical profession with unscientific, unwarranted claims, thus encouraging physicians to use in a routine way medicaments, the therapeutic value of which had not been established, and because the preparations conflicted in other ways with the rules of the Council.

This volume includes a preliminary report on Trichophyton and Oidiomycin—trichophyton preparations marketed by Lederle Laboratories, Inc. This report is a sequel to the preliminary report on Trichophyton Extract issued in 1932, which postponed consideration to await development of further clinical evidence on Trichophyton therapy. Also included in this volume is a report on the unacceptability of two trichophyton preparations, Dermatomycol and Dermotricofitin, distributed in this country by Ernst Bischoff Co., Inc., under the stated proprietary names without sufficiently declared composition and with unwarranted therapeutic claims.

Other preliminary reports are Refined and Concentrated Antipneumococcic Serum, Type VII, Lederle, Present Status of Tetrachlorethylene (since accepted for N.N.R.), Smallpox Vaccine (from Chick Chorio-Allantoic Membrane) Lilly, and Use of Trichloroethylene for General Anesthesia.

CLINICAL ALLERGY DUE TO FOODS, INHALANTS, CONTACTANTS, FUNGI, BACTERIA AND OTHER CAUSES. Manifestations, Diagnosis and Treatment. By Albert H. Rowe, M.S., M.D., Lecturer in Medicine in the University of California Medical School, San Francisco, California; Chief of the Clinic for Allergic Diseases of the Alameda County Health Center, Oakland, California; President of the Association for the Study of Allergy, 1927-1928. Philadelphia: Lea & Febiger, 1937.

In writing this book, the author has attempted to cover the entire field of clinical allergy. After discussing the origin, nature and mechanism of allergy, he discusses its clinical aspects as they are observed in the various systems of the body. Gastrointestinal allergy in its manifold manifestations is well covered. The facts concerning bronchial asthma, nasal allergy, allergic dermatoses, urogenital allergy, allergic migraine and the nervous and arthritic symptoms of allergy are given, as interpreted by the author. No book by this author would be complete without a consideration of diet as a factor in allergy and here he gives a detailed discussion of his "elimination diets." He recognizes, however, that inhalants, contactants, drugs, physical agents, as well as ingestants, are frequently major factors in the cause of allergic symptoms. He has given them due consideration in his discussion of allergy, whatever its manifestations.

While his enthusiasm may not be shared by all, the author believes that allergy is much more frequently a factor in the etiology of disease than now generally recognized. The sum of the knowledge concerning allergy and its symptoms is put in such form that the student and specialist may find ready at hand the latest on the subject.

ENDOCRINOLOGY CLINICAL APPLICATION AND TREATMENT. By August A. Werner, M.D., F.A.C.P., Assistant Professor of Internal Medicine, St. Louis University School of Medicine; Associate Physician, St. Mary's Group of Hospitals; Physician Endocrine Clinic, St. Louis City Hospital; Staff Member, St. Louis City Hospital, Sanitarium and Infirmary; St. Louis Training School for Mentally Defective Children and the Missouri State Hospital No. 1, Fulton, Mo. Illustrated with 265 engravings. Philadelphia: Lea & Febiger, 1937.

The author has attempted to give a summary of the knowledge now available. While he realizes that much of it is inexact, he believes that, if available, it will aid in the diagnosis and treatment of endocrine diseases. His handling of the subject of defective function of the pituitary is fascinating and lucid. He discusses the various known and theoretical hormones and the diseases resulting from dysfunction. He shows the effect of pituitary hypofunction on the development of the hands and stresses the value of this evidence in diagnosing these conditions. In his treatment of the subject of function of the sex glands he discusses the menstrual cycle, its relations to ovulation and the "safe period." The cause of derangements of this function are detailed in the light of present knowledge. The menopause and the treatment of its distressing symptoms is given. Abnormal growth and development as caused by the inter-relation of the pituitary, the gonads and other endocrine glands is made easy—hormones now commercially available and from ly understood. He discusses the preparation of the hormones now commercially available and from time to time suggests their use, yet frankly states that many of them are only of theoretical value. In other cases he recommends a preparation "if and when available."

The function of other glands with internal secretion are discussed under their appropriate headings. The effect of the endocrines on obesity, on the hair, skin and the teeth is given as now understood. Many excellent illustrations are seen, which add interest and make the text more readily comprehended.



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FURTHER OBSERVATIONS ON ACUTE PERFORATED ACID ULCER OF THE STOMACH AND DUODENUM*

H. K. SHAWAN, M.D.
DETROIT, MICHIGAN

We are continuing our previous reports^{4,5,6} on acute perforated gastric and duodenal ulcers operated upon at the Receiving Hospital of Detroit, from January 1, 1920 to January 1, 1937. In all of these cases, gastro-duodenal contents were escaping freely into the peritoneal cavity. The list comprises 356 cases, of which 74.15 per cent were discharged as improved and 25.84 per cent died.

The late Lord Moynihan³ stated, "Perforation of the stomach is usually described as being of two varieties—acute and chronic; but there is, as I first pointed out, an intermediate class of cases, not embraced by either of these terms, which is best described as subacute." "In the subacute form," he goes on to say, "the perforation occurs as quickly as in the acute type. However, due to the small size of the perforation, the emptiness of the stomach, early plugging of the opening by neighboring organs, or to speedy lymph closure, the escape of contents is early prevented and the contamination is much reduced."

In spite of this more exact classification, some question has arisen. Should an ulcer with a history of rupture of only a few hours duration be classified as subacute when the operative findings indicate some minor efforts toward closure? We leave this open for solution. If our recently sealed ruptures be added to our actual open perforations, we can add twenty-five more of these latter cases. All but one were males. One was drained only. The rest had simple closure or closure with gastro-enterostomy. The operative mortality was 20

per cent. However, we are not including subacute perforations in this report.

Dragstedt¹ editorially states that as a direct result of planned procedures, ulcers have been caused to develop in the lower animals and to duplicate in almost every particular the lesion encountered in man, including perforation. Much of his valued observations must be omitted but the summary is that "if it seems wise to stress the importance of the chemical action of the gastric content in the etiology of ulcer of the stomach and duodenum, the term 'acid ulcer' is more accurate than 'peptic ulcer' and serves to direct attention to the more important element in the gastric juice." Hence, we have used the term of acute perforated "acid ulcer."

General Considerations

Of this list of 356 cases of acute open perforated ulcers, only six were women, an incidence of less than 2 per cent. The average age was slightly over thirty-seven years. Nine occurred in men less than twenty years old, while eight men were over

*From the Departments of Surgery of the Receiving Hospital and Wayne University College of Medicine. Read before the Michigan State Medical Society at the Annual Meeting, Detroit, Michigan, September 23, 1936. Cases to January 1, 1937, are added.

PERFORATED ULCER OF THE STOMACH—SHAWAN

sixty years of age. Between twenty-one to thirty years, 26 per cent occurred; thirty-one to forty years, 32 per cent; forty-one to fifty years, 26 per cent and fifty-one to sixty years, 10 per cent.

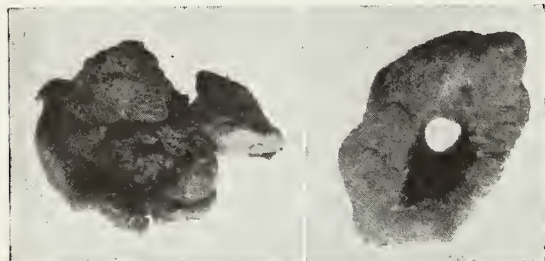


Fig. 1—(left) Small ulcer; (right) hard calloused ulcer. The two types of perforations. The calloused ulcer to the right had a long ulcer history. The soft-walled ulcer to the left gave a history of little or no previous trouble.

As to nationality, nearly half were native Americans. Next in order were forty-two negroes and twenty-eight Canadians. In spite of the large series reported from Russia, very few Russians are in this list.

It has been thought that ulcer symptoms and also perforations occur most frequently during the changeable weather of Spring and Fall. Such is not our finding. The records show that the fewest perforations occur in Winter, they increase in Spring, are most frequent in Summer and decrease in Fall.

TABLE I. SEASONS OF THE YEAR IN REFERENCE TO PERFORATIONS

Season	Recovered	Died	Total	Per Cent Died
Winter	54	15	69	21.73
Spring	63	22	85	25.88
Summer	87	33	120	27.5
Fall	60	22	82	26.82
	264	92	356	

Our records show a decided increase in ulcer perforation. In 1920, there were only two cases in which operation was performed, while in 1936 there were fifty cases. The marked increase in 1936 is of note as thirty-seven of the fifty perforated ulcers that year were in the last six months. This is difficult to explain as general conditions were much improved over some of the preceding years.

A history of dyspepsia was obtained in

TABLE II. YEAR OF PERFORATION, COMPARING NUMBER OPERATIONS PERFORMED WITH NUMBER OPERATED ON FOR PERFORATED ULCER

Year	Total Number of Operations	Perforated Ulcers
1920	763	2
1921	3,383	5
1922	3,747	10
1923	3,650	10
1924	3,524	11
1925	3,681	17
1926	3,672	21
1927	3,973	17
1928	4,228	30
1929	4,096	26
1930	4,243	24
1931	3,673	28
1932	3,473	26
1933	3,523	23
1934	5,048	23
1935	3,776	33
1936	5,020	50

80 per cent and denied in 15 per cent (Fig. 1). It is well known that with some patients during the crucial period of perforation, it is difficult to obtain an authentic history of previous gastro-duodenal troubles. Later on, should convalescence ensue, a better tale is told.

As to history of previous anti-ulcer treatment, 8 per cent stated they had had none; 12 per cent had had medical treatment. Soda, food and the like had been used to allay epigastric pain in 37 per cent and in 42 per cent, methods used, if any, were not recorded. The type of treatment used and the strict adherence to medical advice varied. However, five died in this hospital while under strict medical regime for ulcer.⁷

Immediate Complaints and Findings

The outstanding complaint in 97 per cent was acute, sudden, unbearable, epigastric pain. In less than 2 per cent was the pain gradual in onset. In these latter cases, minute openings were found, or the opening was almost plugged by solid food particles. In two of these, the posterior duodenal mucosal wall was found to be herniating through the perforation, acting as it were like a cork. Vomiting, or rather retching, was reported in 156 and was entirely absent in sixty-eight of the 356 cases. Blood stained vomitus was extremely rare.

The outstanding finding was board-like epigastric rigidity in those seen early. Later

PERFORATED ULCER OF THE STOMACH—SHAWAN

TABLE III. HOURS ELAPSING BEFORE OPERATION

Hours	Recovery	Died	Total	Mortality Per Cent
Under 6	147	18	165	10.90
-12	79	21	100	21.
13-18	19	20	39	51.28
19-24	9	9	18	50.00
Over 24	8	18	26	69.23
Not Recorded	2	6	8	75.

TABLE IV. LOCATION OF ULCER

Location	Recovered	Died	Total	Per Cent Died
Duodenum	157	52	209	24.8
Stomach	67	21	88	23.8
Pylorus	39	18	57	31.5
Gastro-jejunum	1	1	2	50.
Totals	264	92	356	

on, many had right iliac tenderness and spasm.

The assistance of the Laboratory has been recorded before⁵ and no essential change has been noted. History, examination, finding an obliterated liver dullness have been of considerable help but with these pointing to perforation, the patient was first fluoroscoped. Finding air under the diaphragm indicated operation. A distinct history of perforation without finding air did the same thing. Although a preliminary gridiron appendiceal incision may have been made and gastro-duodenal fluid found, this incision was used for drainage and the perforation was attended to through an upper right rectus incision.

In considering those factors influencing recovery and death, certain points have been outstanding. The larger the perforation, the size of particles and amount of escaped gastric duodenal contents seem to have an important bearing on the outcome. Good results were obtained with small openings and slight soiling. Large perforations and large gross escaped material such as grapes were almost uniformly hopeless.

Table III illustrates the importance of the time element.

The operative mortality was greatest with gastro-jejunal postoperative perforated ul-

cers. Next in order were those in the pylorus, then duodenal ulcer perforations and lowest in the gastric ulcer perforations.

Although Luff² prefers to classify pyloric ulcer perforations with the duodenal ulcer ruptures, many anatomical findings indicate that they might better be included with gastric perforations. In so doing combined gastro-pyloric ulcer perforations (145) seem to have become nearly as frequent as those in the duodenum (209).

Type of Operation Employed

As to type of operation employed, we still prefer simple closure or excision and closure rather than closure with gastro-enterostomy unless the resulting closure obstructs the stomach outlet. The best results were obtained when the perforated ulcer was excised and a pyloroplasty done—using the Horsley or the Judd technic. Nineteen out of twenty-one patients recovered. So far, we have not used the extensive resection of the stomach, employed in certain Austrian and Russian clinics. If the perforation is small, of recent occurrence and the soiling not great, drainage was dispensed with.

Other findings are briefly reported by means of tables.

TABLE V. TYPE OF OPERATION EMPLOYED

Type of Operation	Number Operated	Number Died	Percentage Died
Simple closure	274	72	26.27
Excision ulcer and closure	33	10	30.30
Closure with gastro-enterostomy	24	5	20.83
Excision ulcer and pyloroplasty	21	2	9.52
Gastrojejunostomy repair	2	1	50.
Drainage only	2	2	100.00

TABLE VI. AGE INCIDENCE IN THE 92 DEATHS

Age	Number	Percentage
Under 20.....	2	2.17
21-30.....	17	18.47
31-40.....	30	32.6
41-50.....	25	27.17
51-60.....	14	15.21
61-70.....	4	4.34

TABLE VII. TIME OF OCCURRENCE OF DEATH AFTER OPERATION

Time	Number
On table.....	4 patients
24 hours.....	25 patients
2-6 days.....	30 patients
7-14 days.....	18 patients
2-3 weeks.....	6 patients
4-8 weeks.....	6 patients
Not stated.....	3 patients

Spinal anesthesia was most satisfactory, both as to ease of operative technic and as to recovery rate. It was used in about 43 per cent of the cases, with a mortality rate of 14 per cent. Other types of anesthesia combined were used in 57 per cent, with a mortality rate of 34 per cent.

Conclusions

1. Three hundred and fifty-six acute perforated acid ulcers operated upon during the past sixteen years are summarized.

2. Twenty-five subacute perforations are not included in this list.
3. Perforated ulcers are increasing in number, especially in Summer.
4. Sudden severe epigastric pain, rigidity and the finding of sub-diaphragmatic gas are the most reliable diagnostic aids.
5. Small duodenal perforations had the best recovery rate.
6. Simple closure type of operative treatment was preferred.
7. Best results were obtained with excision of the perforated ulcer and pyloroplasty.
8. Other findings are discussed.

Bibliography

1. Dragstedt, L. R.: *Surg. Gynec. & Obst.*, 62:1, 117-119, 1936.
2. Luff, A. P.: *British Med. Jour.*, 2:1128, 1929.
3. Moynihan, B. G. A.: *Ann. of Surg.*, 45:223, 1907.
4. Shawan, H. K., and Vale, C. F.: *Ann. of Surg.*, 78:342-348, 1923.
5. Shawan, H. K.: *Ann. of Surg.*, 98:210-220, (August) 1933.
6. Shawan, H. K.: *Jour. Mich. State Med. Soc.*, 33:434-439, (August) 1934.
7. Vale, C. F., and Cameron, D. A.: *Ann. of Surg.*, 103: 353-361, (March) 1936.

TUBERCULOSIS IN HIGH SCHOOLS: VARIATIONS IN FINDINGS

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In the United States where a high school education is possible for nearly all children and is compulsory in some places, the subject of tuberculosis in the high schools is of importance sooner or later to practically all families. Health education of whatever kind in the high schools is of great value, too, not only because of the greater ability to absorb at that age, but because of the natural tendency to spread the information procured to adult members of the family. This latter point is of particular value in families of foreign parentage where the language difficulty is often insurmountable by general public educational methods.

From the medical angle a tuberculosis program in high schools is chiefly a study of this disease in a specific age bracket. Though tuberculosis exists in all ages, there are certain peculiarities recognized today for the adolescent ages.

The more serious so-called adult type disease begins to appear more frequently with the onset of adolescence and increases rapidly thereafter. This is in contradistinction to the very low rate of the serious adult type disease found in the lower grade children, ages five to eleven.

The physiological changes occurring in

adolescence have an important influence on the body infected with the tubercle bacillus.

There is a natural tendency to increase one's social activities, particularly in the later high school years. This has a definite effect from two distinct angles:

1. In the field of sport, overwork resulting from the added physical exertion by members of school teams definitely causes a tuberculosis breakdown in some students already infected. It appears that the combination of school work, home work and practice playing added to the strenuous playing in an inter-school competitive game may

result in exhaustion, with consequent activation of an otherwise quiescent lesion.

2. There is often the beginning of close friendship with its increased danger of tuberculosis contact. This disease was spread from one student to another in two instances following a history of "keeping company."

It is universally accepted today that tuberculosis is in great part a socio-economic disease. In a community program, particularly a program of prevention, this factor should never be lost sight of. Where both the social and economic conditions are poor, tuberculosis will be found with greater frequency than where either one or the other is below standard. On the other hand where both the social and economic conditions are good, tuberculosis will in most cases be of an almost negligible quantity.

Putting this information to practical use, then, we look for tuberculosis in the poor sections of a community and the poorer the social economic area, the greater is the amount of disease to be discovered. One of the most important socio-economic factors in any contagious disease, including tuberculosis, is that of overcrowding. This factor arises in all discussions of community tuberculosis.

It is apparent then that in small communities where there is little if any overcrowding, tuberculosis will be only rarely discovered not only in the high school students but also comparatively so in the general population. If this disease is to be found, it should first be looked for among the poorest families, particularly those with overcrowded housing.

The tuberculosis case-finding work in the high schools of Wayne County has been carried out for the past six years, with very interesting results. It consists of tuberculin test x-ray screening.* In the last three years the work has been limited practically to the 11th and 12th grades, ages fourteen to nineteen. In 1936, 32 public and parochial schools were studied and 9,594 tuberculin tests were completed, 24.8 per cent of which reacted positive. Following these up with x-ray we found 35 cases of adult type disease and 356 inactive childhood type.

*Fluoroscopic examination is not dependable in early lesions.

The classification of the adult type cases found, is as follows:

TABLE I.

	Minimal	Moderately Advanced	Far Advanced	Total
No. of cases	25	10	0	35
Percentage	71.5%	28.5%	0	100.0%

It is very interesting to compare the classification of the cases found in the high schools in the last six years with that found by other means, including examination by private physicians, clinic examination, contact examinations, et cetera. The total of 147 cases found for this six-year period, 1931-1936 inclusive, is compared with an equal number similarly reported at that time through official channels.

TABLE II. CLASSIFICATION OF ADULT TYPE CASES—1931-1936
(A) Case-finding Unit
(B) Other Means

	Minimal	Moderately Advanced	Far Advanced	Total
Percentage (A)	73.5%	25.2%	1.3%	100%
No. of cases	108	37	2	147
Percentage (B)	19.1%	36.7%	44.2%	100%
No. of cases	28	54	65	147

An analysis of Table II shows that 73.5 per cent or four out of five cases discovered in the high schools were minimal lesions while of those discovered by other means only 19.1 per cent or one out of five cases had an early lesion. Similarly, in the high school program only 26.5 per cent showed advanced disease (including moderately advanced and far advanced), whereas in the combined other methods of diagnosis 80.9 per cent were found to have advanced disease when first discovered.

From Table III it is apparent that the finding of serious adult type disease in the high schools persists from year to year. It will be noted that fourteen students in one school, 1 per cent of those tested, were found to have adult type tuberculosis, all requiring hospitalization. At that time a detailed study pointed to a girl with moderately advanced tuberculosis spreading this disease to five of her classmates. This stu-

TABLE III. FIVE-YEAR STUDY IN TWO HIGH SCHOOLS

	1931 -32	1932 -33	1933 -34	1934 -35	1935 -36	Total
School I						
No. of Adult Type	4	3	0	6	4	17
Per cent of Adult Type	.63	1.17	0	1.18	.85	.73
No. Tested	626	255	452	508	469	2310
School II						
No. of Adult Type	14	2	2	3	4	25
Per cent of Adult Type	.96	.48	1.08	.49	.87	.80
No. Tested	1456	411	184	602	459	3112

dent had no symptoms and was active in the basket ball and hockey team at the time of diagnosis. Incidentally, her own source of contact was discovered a year later when she learned that a man who had boarded in her home for two months died from tuberculosis.

Fortunately, a similar situation did not occur in that school in the succeeding four years though two to four additional cases were discovered there annually. Nor was the finding of as high as 1 per cent of adult type disease limited to that one school. An equally high percentage of adult type disease was found in one or another school at various times.

Tuberculosis will be consistently found in high schools properly selected. That our results are not due to haphazard findings can readily be shown. Several schools are examined annually, others biannually. Where tuberculosis is found regularly, each student has an opportunity for two examinations before graduation. The first test is given in the 11th grade followed by an x-ray if there is a tuberculin reaction. In the 12th grade those who previously had a negative tuberculin test are given a second test, while those with a negative x-ray are again x-rayed. This procedure catches the cases developing a positive tuberculin test in the past year and also those who may have developed an x-ray diagnosis since their previous examination.

Finally, it appears from this six-year study that tuberculosis case-finding itself is not a complete procedure for elimination of this disease in high schools. It seems that certainly the higher percentage of spreading takes place from the home or at least outside the school room. Therefore, it is necessary that the high school program be a part of a more general program to diagnose and isolate the active cases found outside of the school. Until this is carried out new cases will continue to appear in selected high schools each year.

THE USE OF THE LAPAROSCOPE

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Always before us in a large hospital is presented the problem of the accurate diagnosis of intra-abdominal tumors and the interpretation of the source of serous effusions. Although the method of laparoscopy is new to us, it was first demonstrated in 1901 by Kelling, "a surgeon from Dresden, who introduced a cystoscope into the abdominal cavity for the purpose of examining the viscera."

In the summer of 1933 the opportunity presented itself of seeing the laparoscope in use by Dr. Hans Christian Jacobaeus, professor of medicine at the Serifimerlas-arettett in Stockholm. My first meeting with him was in a darkened treatment room, where he was looking through a tube into the interior of the abdomen. To see in this manner the liver, gall bladder, peristalsis in the intestines and a considerable area of peritoneal surface was an exciting experience. Since 1910, Dr. Jacobaeus had employed the laparoscope; his first paper describing 115 examinations was written in 1911, a second with colored illustrations in 1912.

About two years ago, I acquired the Jacobaeus instrument and began the work with dogs. With these animals it could be shown that pneumoperitoneum pressures necessary for examination were well tolerated; that without fear, the needle and trocar could be introduced and that the scar

marking the site of the trocar opening showed in a short time only as a dimple on the peritoneal surface. The many lobed liver could be seen in its entirety and the spleen—an elusive organ in the dog—could be easily found. Work with autopsy material was not so instructive, since with the onset of rigor mortis, the frozen muscles of the abdominal wall interfered with a satisfactory pneumoperitoneum.

Technic of Laparoscopy

Laparoscopy is done under local anesthesia, particular care being taken to infiltrate the parietal peritoneum. If ascites is present, the fluid is drawn off and replaced with air; if no fluid is present, a pneumoperitoneum is done carrying the air pressure to 18 mm. mercury, a level which is comfortably tolerated by most patients.

Into this domed air-space overlying the contents of the abdomen, the trocar is introduced and with removal of the stillette the laparoscope may be put in place.

In order to increase the available space within the abdomen the following preparations for laparoscopy are routinely ordered: (1) a light meal; (2) a simple enema; (3) the bladder is emptied; (4) pitressin, 1 c.c.; (5) morphine sulphate, gr. $\frac{1}{4}$.

Through the laparoscope the presenting landmark is the round ligament stretching from the liver margin, which is tipped forward, to the umbilicus. The normal field of vision is $2\frac{1}{2}$ inches in diameter. The magnification is doubled, when the tip of the instrument is brought close to the structure being examined; and a considerably greater field is included when the instrument is carried four to six inches away.

Diagnosis by Laparoscopy

It has been possible at Harper Hospital and Eloise to diagnose a variety of conditions. The most frequently encountered pathology has been *cirrhosis* of the liver. Cirrhosis is seen in all phases, from the earliest form showing a finely granular liver surface marked with slender grayish lines of scar, to the late or terminal cobblestone liver, commonly found at autopsy. By successive laparoscopic examinations the progress of the disease may be directly observed. The development of a collateral circulation proportional to the degree of liver damage is noticed.

Carcinoma also may be recognized through the laparoscope, involving in this series the liver, the gall bladder and the colon. *Carcinomatosis* presents a striking picture, easily diagnosed; in this classification was found a gelatinous infiltrating carcinomatosis. A most important use of the laparoscope lies in deciding the operability of a known case of carcinoma, since metastasis may often be easily seen and the patient spared futile surgery.

Other pathology encountered included a liver enlarged by *simple passive congestion* with a full rounded anterior margin and increased pulsations; also a *generalized sub-acute peritonitis*.

Certain conditions, particularly accessible to laparoscopic examination, which we have not yet chanced to observe include: polyserositis, tuberculosis peritonitis, hepar lobatum, primary carcinoma of the liver, omental tumors, fatty liver, pneumococcal peritonitis.

As a result of the frequent examinations of tumors and fluid collections within the abdomen and subsequent examination by the laparoscope, we have been impressed by the high percentage of inaccuracy in diagnosis and by the need for more careful study by simple, available methods. These methods are briefly listed: shifting dullness, ballottement, outlining the areas of hyperesthesia, percussion, auscultation, a study of contours, of abdominal respiration, of abdominal veins, inflation of the stomach or colon by air and by pneumoperitoneum preceding the roentgen examination. For careful palpation relaxation of the muscles of the anterior abdominal wall is essential. Morphine sulphate is useful. Immersion of the patient in a warm bath may relax completely the muscles and permit accurate palpation of a tumor mass.

Physiology (intra-abdominal)

Equal in interest to the pathology is the physiology viewed through the laparoscope. The broad sweep of the parietal peritoneum lining the anterior abdominal wall shows shining white and smooth. The abdominal veins, often in surprising detail, are transilluminated through the wall. The blue-green gall bladder, situated in its notch in the liver margin, occasionally contracts.

Peristalsis is observed in the jejunum and ileum. Deep haustrations may be present in the colon and the white barium mixture from a recent roentgen study is sometimes encountered, quite visible through the colon wall.

The most fascinating structure of all is the omentum, which is extremely delicate, gliding like a film of oil over the coils of intestines. When ascites fluid is present, the omentum floats evenly on the ripples created by the commotion of the abdominal aorta, by peristalsis and by the descent of the liver in respiration.

Case Presentations

From a series of fifty examinations the following seven representative case histories are reported to illustrate the findings in a laparoscopic examination:

Case 1.—A man, fifty-six years old, was referred for laparoscopy because of an abdominal tumor. It is of interest that he was treated for pernicious anemia for many months before the tumor could be palpated.

Laparoscopic examination: "Pneumoperitoneum was carried to 18 mm. mercury. The surface of the liver and the peritoneum were normal in appearance. In the position of the mass felt externally, a carcinoma could be identified, apparently arising from the bowel, with an inflammatory reaction at its margin and adhesions. The small bowel over a considerable area appeared to be entirely normal. There was no free fluid in the abdomen."

Operative report: "The abdomen was dry. The liver and gall bladder were normal. There was a mass in the left upper quadrant region of the colon. This mass consisted of a constricting growth in the splenic flexure of the colon with a secondary extension to the greater curvature of the stomach."

Case 2.—A man, thirty-five years old, was examined to determine the correctness of a suspicion of polyserositis. He had shown a rather persistent precordial friction rub, ascites and swelling of the legs.

"The laparoscopic examination showed only a passively congested liver with a full, rounded anterior margin and increased pulsations. There was no glisson's capsule thickening."

A subsequent autopsy report reads: "1500 c.c. of clear, yellowish fluid was present in the abdomen. The liver was typically nutmeg in appearance. The heart was enlarged with an old healed infarct in the left ventricle wall and myocardial degeneration."

Case 3.—This patient was a woman sixty-six years old, with a right upper quadrant tumor.

Laparoscopic examination: "Pneumoperitoneum was done in the usual manner. The laparoscope was introduced above McBurney's point, one inch below the palpable tumor mass. Examination showed a very large peritoneum covered mass, shining, gray-white in color and nodular, the nodules being in average about the size of a nickel and firm. The mass was attached to the colon and small bowel in the region by slender adhesions; one broad adhesive band also was seen. There was no free fluid in the abdomen. The liver surface appeared normal. The area available for inspection, however, was limited to 10 to 15 square cm. The gall blad-

der could not be seen. The diagnosis was cirrhotic carcinoma extending from the lower liver margin to the upper portion of the right lower quadrant; primary focus undetermined, possibly gall bladder."

The subsequent autopsy report is recorded: "There is no free fluid in the abdomen. The gall bladder is replaced by new-growth tissue which has infiltrated the wall. The mass is grayish white in color. Surrounding the gall bladder notch on the superior surface of the liver are several nodular areas of grayish white new-growth tissue—extension by infiltration, not metastatic."

Case 4.—This man, sixty-four years old, was referred with a tentative diagnosis of cirrhosis of the liver. The liver was enlarged.

Laparoscopic examination: "Pneumoperitoneum was performed and the laparoscope introduced just below the palpable liver margin. The liver appeared to be a deeper red color than usual and the surface roughened by fine granular nodules, often separated by lines of fibrous tissue. Increased congestion of the round ligament was noticed and an increased venous collateral circulation in the veins in the abdominal wall. The impression given was a pre-atrophic stage of Laennec's cirrhosis."

Clinical studies were continued for eight months when this patient was discharged from the hospital. The clinical diagnosis on discharge was cirrhosis of the liver.

Case 5.—A man, age forty-three years, presented the signs of emaciation, abdominal discomfort and distension.

The laparoscope revealed "an amazing cavern dripping with stalactites of a gelatinous new-growth, filling the folds and curves of the small bowel wherever it was visualized." The diagnosis was gelatinous carcinomatosis, primary focus undetermined.

The autopsy report reads: "gelatinous infiltrating carcinoma of the pylorus with metastasis to all the mesenteric folds, peritoneum and omentum. The rest of the stomach wall markedly thickened up to one centimeter by infiltrating new-growth tissue of a firm white nature."

Case 6.—This patient, a man seventy-two years old, was given a diagnosis on admittance to the hospital of right lower lobe bronchopneumonia. This was also so reported from the roentgenogram. When this process failed to resolve and a rapid increase in the liver was observed, a laparoscopy was indicated.

Laparoscopic examination: "Pneumoperitoneum was performed to a pressure of 9 mm. mercury. The liver edge was found to be at the level of the umbilicus. Throughout its substance it was studded by raised white nodules, varying in size. Along the anterior margin of the liver to the left of the round ligament were several spherical nodules. There was no free fluid in the abdominal cavity. The portion of the parietal peritoneum examined and the intestines showed no metastasis."

This patient left the hospital before death and there is no post mortem examination. The probable diagnosis is: primary carcinoma of a lower right bronchus, with liver metastasis.

Case 7.—This woman, age seventy-four, was referred for laparoscopy because of a greatly enlarged liver, presumably due to metastasis from a known melanosisarcoma of the eye.

Laparoscopic examination: "The pneumoperitoneum was tolerated well. The area about the right lower quadrant was examined and showed a highly vascularized peritoneum lining. A short section of the colon was seen, free from metastasis. Over the liver surface were strewn metastatic foci, as many as ten in one field, a few mm. to 2 to 3 cm. in

diameter, shining white in color. A small amount of bloody fluid (3 to 4 cu. cm.) was removed."

The autopsy report reads: "on opening the peritoneal cavity no free gas or fluid was found in the abdomen. The liver was enormously enlarged, extending to the iliac crests on both sides. The liver was mottled with diffuse lightened areas which were firm on palpation. The liver weighed 4200 grams.

Gross pathological diagnosis: melano-sarcoma of the eye, metastasizing to the pleura and liver; microscopic report: spindle-celled melano-sarcoma."

Conclusion

The laparoscope offers a simple and a quite safe means of examining directly the contents of the abdominal cavity and the peritoneal lining for the purpose of diagnosis. It is performed under local anesthesia and is without important discomfort to the patient.

The type of case in which laparoscopy is especially of use has been described. The spleen, an organ not previously mentioned, should be accessible to laparoscopic examination. Likewise the pelvis should be well visualized, and a correct diagnosis of ectopic pregnancy or ovarian cyst might be established. In an excellent article, Dr. Robert B. Hope of Los Angeles has recently described the laparoscopic examination of the pelvis adding hemoperitoneum and ruptured corpus hemorrhagicum to the list of positive diagnosis.

Bibliography

1. Hope, Robert B.: Surg., Gynec. and Obst., 64:229-234, (February) 1937.
2. Madean, Oscar E., and Kampmeier, Otto F.: Endoscopy of the abdomen. Surg., Gynec. and Obst., 41:259-271, (September) 1925.

UNDULANT FEVER (BRUCELLOSIS)*

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Etiology

Undulant fever (brucellosis) is an infectious disease produced by the *Brucella* organisms (Fig. 1) which are Gram-negative coccoid forms. The disease is usually contracted by ingestion of unpasteurized milk or milk products, by penetration of the skin in the handling of infected animals, meats or hides, or through accident in the laboratory. Carriers of *Brucella* are known to exist and may possibly serve as sources of infection. The common species of the organism are *Brucella melitensis*, which is native in goats; *Brucella abortus*, which is native in cattle (Bang's disease); and *Brucella suis* which is found in hogs. In the United States human infection is most often due to the *Brucella abortus*, and least often to *Brucella melitensis*. The *suis* species is the most virulent for man, the *abortus* species least virulent. The organism may be found not only in man but in all domesticated animals and in some wild animals. The human infection has a wide geographical distribution.

Symptomatology

The disease, both in its onset and in its varied human manifestations, most nearly simulates tuberculosis. The fever may be long continued, or intermittent, and is not necessarily undulating in character; or it may be moderate, slight, or absent. Indeed, a high percentage of infections is sub-clinical and unattended by noticeable fever or other symptoms. Unexplained fevers should

not only call to mind the possibility of sepsis, tuberculosis and typhoid fever, but also of brucellosis. The presence of focal infections or of vaguely defined clinical states often called "neurasthenia" should arouse the suspicion of chronic brucellosis.¹

Diagnosis

While careful clinical observation will often arouse the suspicion of the existence of brucellosis, the diagnosis is usually made by laboratory methods.² The preferred laboratory methods are (1) the brucellergin intradermal test, (2) the *Brucella* opsonic (opsonocytophagic) test, (3) the rapid agglutination test, and (4) the isolation of *Brucella* by cultural methods.

1. The first and most useful test is the *brucellergin* test. One-tenth (0.1) cc. of a suspensoid of nucleoprotein isolated from *Brucella* cells is injected intradermally on the forearm and the test is read after forty-eight hours. A positive reaction (Fig. 2)

*From the Departments of Pathology, Wayne University College of Medicine, Detroit, and Eloise Hospital, Eloise, Michigan. Read before the Noon Day Study Club and the Wayne County Medical Society.

consists of an area of erythema with edema or induration which measures from one-half to five inches in diameter. Such a re-

cytosis; and as immune if 60 to 100 per cent of his polymorphonuclear leukocytes show marked phagocytosis.



Fig. 1. *Brucella abortus* $\times 1800$.

action is specific for sensitization to *Brucella* and is due to past or present infection. It does not, however, indicate the patient's immune status which may then be obtained by performing the opsonic test.^{2,4,5}

2. The *opsonic* test is performed by incubating a mixture of live *Brucella* organisms and patient's citrated blood for thirty minutes, after which a blood film of the mixture is stained and twenty-five polymorphonuclear leukocytes are examined and their opsonic power classified according to the number of *Brucella* organisms which they have phagocytized, as follows: negative, no phagocytized bacteria; slight, 1 to 20; moderate, 21 to 40; and marked, over 40 (Fig. 3).

An individual with a positive brucellergin reaction is classified as infected if up to 40 per cent of his polymorphonuclear leukocytes show marked phagocytosis; as infected but with doubtful immunity if 40 to 60 per cent of the leukocytes show marked phago-



Fig. 2. Positive brucellergin test. Note extensive area of edema.

3. The *agglutination* test is of definite value but has the serious disadvantage of being positive (titer of over 1:25) in only

be the most specific and effective method of treatment and is given in doses of 0.2 to 2.0 cc. intramuscularly at three or four day in-

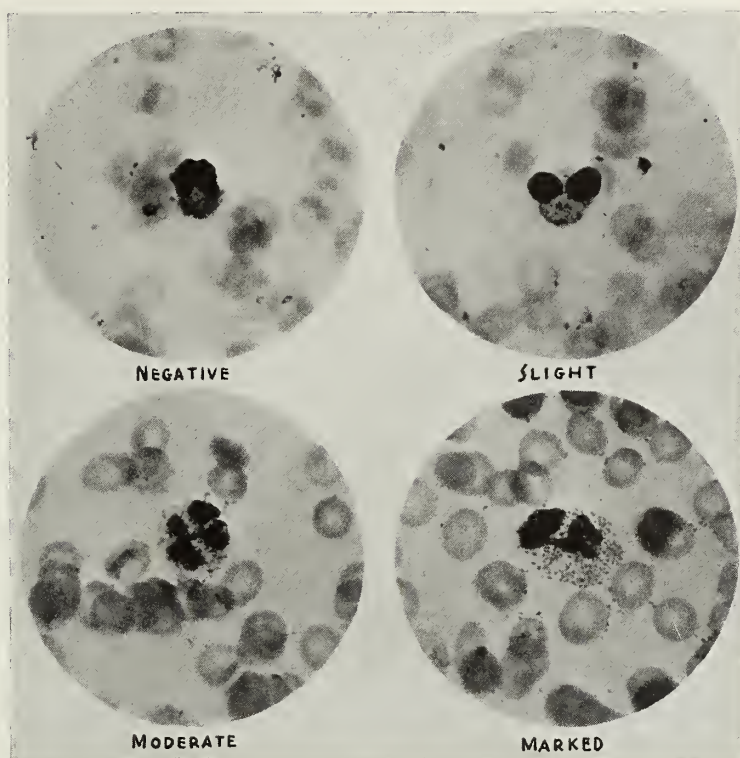


Fig. 3. Brucella opsonic test, showing polymorphonuclear leukocyte with (a) negative, (b) slight, (c) moderate and (d) marked phagocytosis of Brucella organisms.

a small percentage of Brucella infections, so that a negative test does not rule out the presence of brucellosis.

4. *Culture*: The isolation of Brucella from infected material such as blood, urine, stool, bile, or spinal fluid is of great diagnostic value in active infection and carrier states.

Treatment

Measures aimed at the control of the spread of the disease include (a) elimination of infected animals, (b) pasteurization of all milk, and (c) vaccination of humans or animals exposed to infection. Prophylactic vaccination is still in the experimental stage. In the active treatment of human infections the following methods may be mentioned: symptomatic treatment, bed rest, foreign protein injection, fever cabinet therapy, vaccines, convalescent serum, immuno-transfusions, and injection with brucellin. Brucellin, a filtrate of Brucella, is believed to

intervals for four or more injections. In 100 cases of active infection, Huddleson found that the average duration of illness before the use of brucellin was 159 days, and that after the use of brucellin, the average duration of illness was only eighteen days.

Findings of Survey at Eloise Hospital

In a survey of 8124 individuals at Eloise Hospital^{3,4} during 1935-1936 when the milk supply was partly infected with Brucella, 845 or 10.3 per cent gave positive brucellergin intradermal tests. Of the 845 individuals with positive brucellergin tests, 623 or 73.7 per cent, were classified by means of the opsonic test as infected, and 222 or 26.3 per cent as immune. Positive agglutination tests were found in thirty-three or 5.3 per cent of the infected individuals, and in seventy-eight or 39.6 per cent of the immune individuals.

A significant agglutination titer (over 1:25) was found in only one individual

among 725 having negative brucellergin tests. Among the 845 individuals with positive brucellergin tests, only 111 or 13.1 per cent had positive agglutination tests. In other words, the brucellergin test was much more sensitive than the agglutination test.

Cultures done on the 845 individuals with positive brucellergin reactions were positive in five cases: in three cases of active infection *Brucella* was recovered from the blood; in one carrier, organisms were isolated from the urine, and in another carrier, from both the urine and the stool.

Summary

1. Brucellosis occurs in man and in all domesticated animals and is world-wide in distribution.
2. Acute brucellosis should be suspected in unexplained fevers; chronic brucellosis in focal infections and "neurasthenia."
3. The brucellergin test is the most sen-

sitive test in the diagnosis of *Brucella* infection.

4. A positive brucellergin test together with the opsonic test will determine *Brucella* susceptibility, infection, or immunity.

5. The agglutination test is diagnostic only in a small percentage of cases and a negative test does not rule out infection.

6. Carriers of *Brucella* exist and may prove to be of importance in the spread of infection.

7. The use of brucellin is highly effective in the treatment of the disease.

References

1. Evans, A. C.: Chronic Brucellosis, *Jour. A. M. A.*, 103: 665, (Sept. 1) 1934.
2. Huddleson, I. F.: *Brucella Infections in Animals and Man*. New York: The Commonwealth Fund, 1934.
3. Huddleson, I. F., Gould, S. E., Munger, M., and Paulson, D. M.: A study of *Brucella* infection and immunity in a large county hospital. *Jour. Bacter.*, 32:32, (January) 1937.
4. Gould, S. E., and Huddleson, I. F.: Diagnostic methods in undulant fever (Brucellosis), with results of a survey of 8,124 individuals, *Jour. A. M. A.* (in publication).
5. Keller, A. E., Pharris, C., and Gaub, W. H.: Diagnosis of undulant fever. *Jour. A. M. A.*, 107:1369, (Oct. 24) 1936.

TREATMENT OF ATROPHIC ARTHRITIS

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The treatment of any condition, the etiology of which is unknown, is usually difficult. The treatment of atrophic arthritis is no exception. There is a general impression that the management of cases differs according to whether one accepts the infectious theory, the unitarian theory or the "eclectic" theory. However on accurate analysis we find the differences should not be so great as one would expect. If one accepts the infectious theory, for example, and treats his cases by removal of foci of infection and later by vaccines, he will soon find that there are many other factors such as imbalance or dysfunction of the gastrointestinal, nervous and peripheral vascular systems, which need to be treated. Because of this the treatment of the arthritic eventually resolves itself into the management of the patient from many different viewpoints. That the situation has been somewhat clarified can be attributed to two factors:

1. The recognition that there are two great classes of chronic non-specific arthritis, atrophic (rheumatoid) and hypertrophic (osteoarthritis).
2. The recognition that "atrophic arthritis is a systemic malady and must be treated as such."¹

With the increasing interest manifested by the medical profession in arthritis, there has been a proportional increase in the new products for the "cure" of rheumatism.

therefore it is important that more than ever we should carefully analyze our methods of treatment and that at all times it should be based on our present knowledge of the pathology and physiology of the disease.

It is our purpose to present a few cases illustrating the treatment of atrophic arthritis and to present a preliminary report of the results obtained in twenty-three cases.

Case Presentations

Case 1.—I. P. L., white, female, aged fifty-five, school teacher, single, presented as her chief complaint pain, swelling, limitation of motion and deformity of the wrists, elbows, knees, ankles and fingers of two years' duration. The patient stated that these symptoms began insidiously but became acute following an operation on the sinuses. She gave a history of chronic sinusitis over a period of three years previous to the attack, and this condition had been treated conservatively until July, 1935, when a left Caldwell-Luc, ethmoidectomy and sphenoidotomy had been performed. Three days

later the patient noticed pain and swelling in the right elbow and within a few days all the above mentioned joints were involved. Positive findings on physical examination were (1) fever, 99.6; (2) evidence of inflammation of elbows, wrists, fingers, knees and ankles; (3) evidence of loss of weight; (4) malnutrition; (5) small anal ulcer. Laboratory examinations showed red blood cells 4,530,000; hemoglobin 11.7 grams, white blood cells 8,400, polys 70 per cent, small lymphocytes 28 per cent, eosinophiles 2 per cent. Sedimentation rate 30 mm. in sixty-five minutes. Normal blood chemistry. After the temperature had returned to normal the basal metabolic rate was plus 20. Stool examination revealed many chilomastix mesnili cysts. The treatment consisted of: 1. Rest in bed for six weeks with a modified rest regime after this period. 2. Local heat applications to the joints twice daily. 3. Gentle massage (not over the joints). 4. Carbarsone for intestinal parasites. 5. Vitamin therapy, ABD capsules, daily sunlight baths. 6. Intravenous streptococcal hemolyticus vaccine (Lederle) was administered for a period of six months. It was discontinued for one month and then given for three more months. The initial dose was 2 minims and was increased one minim each week for Dilution 1, 2 and 3. 7. Graduated exercises, at first passive, then active. 8. The patient was definitely undernourished and was placed on a high caloric, high vitamin diet. Proper elimination was established after a period of time with mineral oil preparations. 9. Treatment of anal ulcer.

The patient returned home after six weeks but continued the physiotherapy and vaccine. One year later she was able to drive her own car and perform household duties and in 1937 returned to active duty teaching school.

Case 2.—W. L. A., white, male, aged sixty-one, widower, retired, presented as his chief complaint pain and limitation of motion of right shoulder, both knees, elbows, fingers and wrists, of eleven years duration. The symptoms of arthritis had occurred following an acute attack of tonsillitis. Following this the tonsils were removed but the symptoms of arthritis persisted. The patient states he tried every form of treatment but with no success. On careful questioning it was found that he expected to be cured immediately, early in the course of his disease, and that he had "shopped" from one doctor to another without giving any one physician a reasonable length of time to effect improvement. The only other symptoms of consequence which the patient complained of were chronic constipation and fatigue. Positive findings on physical examination were: (1) Limitation of motion of knees, right shoulder, fingers, elbows and wrists; (2) marked deformity of fingers and wrists; (3) arteriosclerosis; (4) prostatic hypertrophy (benign); (5) evidence of loss of weight. Laboratory examinations revealed red blood cells 4,610,000, white blood cells 6,300, hemoglobin 12.2 gms. Normal blood chemistry, urine and stool. Sedimentation rate was 30 mm. in one hour. X-ray examination of the knees revealed findings typical of atrophic arthritis. The treatment consisted of: 1. Rest in bed for three weeks. 2. Hot fomentations applied to the joints twice daily. 3. Gentle massage supplemented with passive exercise. 4. Low carbohydrate, high vitamin, high caloric diet. 5. Administration of streptococci hemolyticus vaccine, intravenously, in the usual manner for four months. 6. Proper elimination was very difficult to establish. Enemas offered only temporary relief, but because of marked rectal stasis had to be resorted to.

It was impossible to improve the morale of this

patient and his attitude was one of resignation to his fate. This patient failed to improve.

Case 3.—F. F., white, female, aged forty-four, nurse, single, presented as her chief complaint, pain, swelling and limitation of motion of wrists, fingers, ankles and right elbow. The patient stated that the onset of these symptoms had been insidious over a period of one year until she had contracted a severe cold, following which the acute symptoms in the joints manifested themselves. Past history revealed that she had been subject to repeated, severe attacks of sinusitis, tonsillitis and cholecystitis. A tonsillectomy had been performed and the sinus infection had been treated and cured. Positive findings on physical examination were: (1) Fever, 99.2; (2) tenderness over the gallbladder area; (3) pitting edema of ankles; (4) swelling, evidence of inflammation and tenderness of the wrists, fingers, ankles and right elbow. Laboratory examinations showed normal stool and urine. Red blood cells 4,260,000, hemoglobin 11 grams, white blood cells 8,100, polymorphnuclears 58 per cent and small lymphocytes 42 per cent. Sedimentation rate 30 mm. in ninety minutes. The blood chemistry was normal. Basal metabolic rate —24. Drainage of the gall bladder revealed no organisms. X-ray revealed a non-functioning gall bladder. The treatment consisted of: 1. Rest in bed for one week. 2. Heat applied to the joints twice daily. 3. Gall bladder drainage twice each week. 4. Vitamin therapy, iron for the anemia, daily sunlight baths. 5. Thyroid extract, grains one three times daily. 6. Modified rest regime after the first week. 7. Streptococci hemolyticus vaccine (Lederle) was administered intravenously each week, beginning with two minims. The dosage was increased each week by one minim. This was repeated with Dilution 2 and 3. The vaccine was continued for six months.

At the end of three months treatment the patient was able to continue her services as an office nurse satisfactorily. Eighteen months later the patient was still able to perform her duties and was suffering very little discomfort. The swelling and inflammation had entirely disappeared from the affected joints. There was slight discomfort in the ankles only when the patient was on her feet for long periods.

Case 4.—F. M. A., white, male, aged sixty-seven, retired, entered the hospital complaining of pain on motion of the wrists, knees, elbows, fingers, ankles, of thirteen years duration. Stated that in 1921 he had a severe attack of acute tonsillitis and sinusitis and was advised to have an operation. This he refused and subsequently developed a chronic problem. In 1923 he had his first attack of joint pain which affected the ankles and then progressively involved the above mentioned joints. The patient again was advised to have a tonsillectomy and adequate treatment of the sinuses but he refused. The joints became progressively worse and when we first saw him in 1936 it was impossible for him to walk without the aid of crutches. This was made more difficult by the condition of his elbows, wrists and fingers. Positive physical findings were: (1) Deformity and swelling of the fingers, wrists, elbows, knees and ankles; (2) moderate arteriosclerosis; (3) slight enlargement of the heart; (4) dental caries. Laboratory findings were: red blood cells 5,040,000, white blood cells, 6,600, polymorphonuclears 68 per cent, and small lymphocytes 32 per cent. Urine, stools, blood chemistry were normal. Sedimentation rate 30 mm. in one and one-half hours. The treatment consisted of: 1. Rest in bed for four weeks. 2. Daily gentle massage. 3. Fomentations to the affected joints twice daily. 4. Low

carbohydrate, high vitamin diet. Ertron capsules were used in this case. The diet was made moderately reducing because the patient was slightly overweight. The patient had never had any trouble with his elimination. 5. Lederle's streptococcic hemolytic vaccine was started and continued over a period of six months. 6. Orthopedic care.

After four weeks the patient was placed on a modified rest regime. Practically no improvement has been noted in this case.

Case 5.—C. V. R., colored, male, aged twenty, single, presented as chief complaints sore throat, pain on motion of the fingers, right elbow and left knee of eight weeks' duration. He stated that he had an acute attack of tonsillitis in December, 1936, followed by a peritonsillar abscess which apparently ruptured spontaneously. Following this the patient began to have chills and fever, became very ill and was placed in a hospital in Tennessee for treatment. About January 1, 1937, the patient was discharged from the hospital and very shortly after he began to notice pain on motion of the affected joints; there was also some swelling. He came under our observation in March, 1937, and at that time the affected joints had become very painful and he had to spend most of his time in bed. Positive physical findings were: (1) Fever, 99.8; (2) moderate swelling and pain on motion of the fingers, right elbow and left knee; (3) chronic follicular tonsillitis. Laboratory examinations showed red blood cells 3,950,000, white blood cells 7,200. Polymorphnuclears 50 per cent, small lymphocytes 50 per cent, Kolmer and Kahn four plus. Urine, stool and blood chemistry normal. X-ray of the lungs was normal. Sedimentation rate 30 mm. in one hour. The treatment consisted of: 1. Rest in bed for ten days—the temperature became normal after three days. This was followed by tonsillectomy. 2. Modified rest regime for three weeks following tonsillectomy. 3. Hot fomentations to affected joints twice daily. 4. High vitamin, high caloric diet with establishment of proper elimination. 5. Bland's Pills (Burroughs and Wellcome) for secondary anemia. 6. Anti-leucic therapy.

Under this program the patient became symptom-free in six weeks and now returns for anti-leucic treatment only.

Case 6.—E. L., white, female, aged fifty-six, housewife, complained of pain in the right shoulder, fingers of right hand, left knee and right ankle of three months' duration. The patient stated that the pain began suddenly in the right shoulder and rapidly involved the other joints. The only other symptoms were nervousness, fatigue and toothache. Positive physical findings were: (1) Evidence of malnutrition; (2) dental caries; (3) slightly enlarged thyroid; (4) pain on motion of the affected joints; (5) tremor of fingers; (6) cardiac arrhythmia; (7) mitral stenosis; (8) fever, 99.2. Laboratory findings revealed red blood cells 4,930,000, white blood cells 6,900, polymorphonuclears 49 per cent, eosinophiles 3 per cent, small lymphocytes 48 per cent. Basal metabolic rate plus 20. Sedimentation rate 30 mm. in 1½ hours (temperature normal). X-ray of teeth revealed a questionable appearance about the left second molar. The treatment consisted of: 1. Modified rest regime at home. 2. Heat application to affected joints twice daily. 3. Removal of left second molar. 4. High caloric, high vitamin diet. 5. Lugol's solution, 4 minims three times daily. 6. Daily massage and corrective exercises. 7. Lederle's streptococcic hemolytic intravenous vaccine, administered over a period of eight months.

This patient steadily improved and at the present time has no clinical evidence of arthritis.

Discussion

The cases presented are illustrative of the results obtained in twenty-three cases of atrophic arthritis followed over a period of two to three years, and demonstrates that improvement depends largely on how soon adequate management is instituted following the onset of symptoms. In every case in which the patient had started adequate treatment within a period of two to three years, improvement was noted. Unfortunately arthritis affects a large class of individuals who cannot afford financially to have proper treatment instituted and as a result go about looking for some "shot" to give them relief. As the disease progresses and one after another "cure" fails, too late the realization of the fact that such treatment has been inadequate dawns upon the patient, and the result is the despondency of crippling deformity. Cases 2 and 4 very aptly illustrate this point. It is our belief that arthritis, like tuberculosis, can be conquered, but this will not be accomplished until institutions and clinics (such as were formed to fight tuberculosis) are established at strategic points throughout the country. Such institutions, adequately manned by competent physicians, could soon lead the way to victory over this disease which ranks second to none in causing economic loss and human suffering.

The cases further illustrate the fact that the arthritic must be treated from all angles of medicine and that there is no one specific or stereotyped form of treatment. For example, take the question of the advisability of the administration of vaccine therapy. Much of the discredit which has attended the use of vaccine therapy in atrophic arthritis has been due to the fact that the vaccine has been used as a "specific" and has been supposed to act as a miraculous cure and to supplant the general care which is so necessary for each patient. The use of vaccines in such a manner has only led to disillusionment, so much so that some clinicians have disregarded vaccines entirely in the treatment of atrophic arthritis. However, there are certain pertinent facts which cannot be easily disregarded, namely that patients with atrophic arthritis usually give a history of frequent infections, that the onset is often precipitated by an acute infectious insult, and that there is evidence of inflammation of the affected joints. Fur-

ATROPHIC ARTHRITIS—OVERHOLT AND MORTENSEN

A RÉSUMÉ OF TWENTY-THREE CASES

Case	Age	Sex	Occupation	Joints Involved	Past History of infections	Date of Onset of symptoms	Date Adequate Treatment begun	Duration of ob- servation — years	Results
1	55	F	Teacher	Wrists, knees, elbows ankles, and fingers	Old sinus	1933	1935	2	Marked improvement—able to resume teaching
2	61	M	Retired	Right shoulder, knees elbows and wrists	Repeated attacks of tonsillitis	1924	1935	2	No improvement
3	44	F	Nurse	Rt. elbow, wrists, fingers and ankles	Sinusitis and tonsil- litis and cholecystitis	1933	1934	3	Marked improvement. Has resumed nursing.
4	67	M	Retired	Wrists, knees, elbows fingers and ankles	Tonsillitis	1923	1935	2	Practically no improvement
5	20	M	Student	Fingers, right elbow and left knee	Sinusitis and tonsil- litis	1936	1937	1	No clinical evidence of ar- thritis at present.
6	56	F	Housewife	Rt. shoulder and wrists, left knee and rt. ankle	Teeth	1934	1935	2	Marked improvement. Can resume duties.
7	61	F	Housewife	Knees, right elbow and fingers	Old sinus infection	1925	1934	3	Very little improvement.
8	33	F	Teacher	Fingers, ankles, knees elbows and shoulders	Tonsillitis and sinu- sitis	1928	1935	2	Patient improving very slowly.
9	58	F	Housewife	Elbows, ankles and knees	Chronic sinusitis	1928	1935	2	Only moderate improvement
10	41	F	Housewife	Knees and right shoulder	Chr. sinus and teeth	1933	1934	3	Marked improvement. Able to resume all duties
11	55	F	Housewife	Left knee and right elbow	Cholecystitis. Den- tal caries	1934	1935	2	No clinical evidence of ar- thritis at present.
12	61	F	Housewife	Left hand and right knee	Rectal ulcer	1933	1935	2	Gradual improvement.
13	46	M	Attorney	Rt. shoulder, knees, elbow	Dental caries	1933	1935	2	Marked improvement.
14	42	F	Secretary	Ankles, elbows, shoulders	Cholecystitis. Den- tal caries	1930	1933	4	Marked improvement. Able to resume duties.
15	48	F	Housewife	Elbows, fingers, knees, and right ankle	Tonsillitis and chole- lithiasis	1929	1935	2	Improving slowly.
16	25	F	Teacher	Shoulders, hands, elbows, knees and ankles	Dental caries	1932	1934	3	Gradual improvement. Able to work part time.
17	60	F	Housewife	Ankles, knees, elbows and shoulders	Chronic sinusitis	1933	1934	3	Marked improvement. Able to do housework.
18	58	F	Secretary	Right shoulder, left knee and elbows	Dental caries	1934	1935	2	Marked improvement. Able to return to work.
19	55	F	Dietitian	Right shoulder, knees and left elbow	Tonsillitis and den- tal caries	1934	1935	2	Marked improvement. Able to return to work.
20	70	F	Housewife	Shoulders, knees and fin- gers	Marked stasis. Dental caries	1932	1934	3	Gradual improvement. Able to do some housework.
21	36	F	Housewife	Fingers, elbows and right knee	Acute sinusitis	1934	1934	3	Marked improvement. Able to resume work.
22	52	F	Housewife	Knees, wrists and shoul- ders	Tonsillitis	1929	1935	2	Practically no improvement
23	55	M	Mfr.	Ankles, wrists, knees, elbows and fingers	Dental caries and tonsillitis	1932	1935	2	Moderate improvement.

The results of treatment of twenty-three cases of atrophic arthritis showing improvement roughly proportional to how soon adequate treatment was begun following onset of symptoms.

ther, the sedimentation rate is increased and various strains of streptococci have been isolated from the blood of patients with atrophic arthritis in a high percentage of cases by careful investigators.² Because of these reasons we feel that vaccines have a definite place in the treatment of atrophic arthritis. In our experience stock vaccines made by properly equipped laboratories are of more value than autogenous vaccines (where it is impossible to ascertain the

arthrotropic characteristics of the organism, or where the facilities for the experimental production of arthritis are inadequate). The indications for the use of vaccine, the type of vaccine to be employed, the method of administration, and the length of time it should be used, are all unsolved problems and await further clinical investigation. We have obtained best results with the use of Lederle's *S. hemolyticus* vaccine administered intravenously in small doses over long

periods of time (four to twelve months).

What has been said of vaccines applies also to diet. It is our opinion that there is no one diet which is suitable for all cases of arthritis and that much of the concern over various types of diet is unwarranted. It is important that the patient should receive a diet containing sufficient protein, an adequate variety of vegetables and fruits, and probably the diet should be supplemented by vitamin therapy. If the patient is overweight he should be placed on a reducing regime until his weight is normal. Starvation diet, low caloric diets, for the ordinary cases of arthritis are unwise because these cases usually present the picture of malnutrition or undernourishment with anemia, et cetera. It is important, however, in this chronic disease where atony of the bowel has resulted and dysfunction is evident, that the intestinal load be decreased until active exercise, correction of intestinal ptosis, and proper elimination have been established.

The value of complete rest in bed at the beginning of treatment cannot be too strongly emphasized. There seems to be an unwarranted fear of putting the patient with atrophic arthritis to bed and it is often difficult to obtain the coöperation of the patient in this respect because of the fixed opinion in the minds of the laity that they should be kept moving. This phase of the treatment occupies a most important part of our regime and should be undertaken with the object of giving the patient complete mental and physical rest and should be carried out preferably away from home where the aggravating circumstances of everyday environment will be eliminated. It has been our experience that after such a period of rest the nervous instability which these patients often exhibit is much less, inflammation and soreness of joints will have subsided to a large extent and where there has been an elevation of temperature it will often have become normal. The exact length of time that the patient should remain in bed varies with each case and requires careful judgment on the part of the physician. Rest to the extent that ankylosis results should, of course, be avoided. Atrophy of tissues may be avoided to a large extent during the period of complete bed rest by massage given above and below the joints. Applying a general rule to these cases is extremely difficult but for the most

part our patients are put on complete bed rest for not longer than three to six weeks. Following this initial period of complete bed rest the patient is placed on a modified rest regime and his activities are gradually increased.

Proper physiotherapy treatment should be instituted in every case of chronic atrophic arthritis. Physiotherapy should be administered with the object of accomplishing the following purposes: 1. Increase circulation to the affected joint. 2. Prevent deformity and increase motion of the affected joint. 3. Overcome atrophy and fibrosis of muscles and periarticular tissues.

The subject of physiotherapy has been thoroughly covered in the *Handbook of Physical Therapy*² edited by the American Medical Association and as space does not permit complete discussion of this important phase of treatment, the reader's attention is directed to this reference.

Case 5 is an excellent example of the results that can be obtained by early removal of focal infection. So much has been written concerning this subject that it hardly seems necessary to further stress this very important factor. In a series of two hundred cases, Cecil³ demonstrated the value of early removal of foci of infection by showing improvement or cures in 82 per cent. The upper respiratory tract, in our experience, has been the most frequent location of foci of infection. Tonsils, sinuses, adenoids, teeth should be carefully examined, but should be considered innocent until proven guilty. It is our feeling that too often innocent teeth are extracted which could have been saved had a conservative dentist been consulted. The gastro-intestinal tract, prostate, and genito-urinary tract, should all be examined carefully.

Summary

1. The results of treatment of twenty-three cases of atrophic arthritis are reported. The treatment of six representative cases is described in full.

2. The general treatment, with particular emphasis on physiotherapy and rest, is stressed rather than any one so-called specific measure.

3. Clinical results justify the use of streptococcic hemolyticus vaccine (Lederle), not as a specific but as part of the general treatment. The intravenous route, using

small doses over relatively long periods of time, is preferred.

4. Improvement of patients suffering from atrophic arthritis depends largely on how soon adequate treatment is instituted following the onset of symptoms.

References

1. American Medical Association: *Primer on Rheumatism: Chronic Arthritis*. Chicago: American Medical Association, 1934.
2. American Medical Association: *Handbook of Physical Therapy*. Chicago: American Medical Association, 1936.
3. Cecil, Russell L., Nicholls, Edith E., Stainsby, Wendell, J.: The bacteriology of the blood and joints in chronic infectious arthritis. *Arch. Int. Med.*, 43:571-605, (May) 1929.

INFANTILE ECZEMA*

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Before entering into the discussion of Infantile Eczema and other allergic dermatoses, I would like to ask your indulgence in the matter of terminology. For one untrained in Dermatology, the nomenclature of this subject is very confusing. For this reason I have as a matter of practical experience followed a fairly simple classification of the Infantile Eczemas, by no means original.

1. The largest group, having symmetrical weeping, crusting lesions confined chiefly to the cheeks (atopic?).

2. The seborrheic type with cradle cap of varying degree and presenting as a rule dry, scaling, facial and trunk lesions.

3. The contact eczemas, usually less symmetrical than the first two groups, generally dry scaling with many sharply demarcated areas usually affecting the face, limbs and trunk.

From a practical standpoint, it is often difficult to differentiate clearly these types and more often than not, they are merged in the same patient. The importance of differentiation, although as a rule it cannot be clear cut, is that the first group is generally considered truly atopic. These patients usually give a positive family history of allergy, and in later life generally develop chronic eczema, hay fever or other allergic disturbances. It is in this group that we find a rather confusing phenomenon. In a large percentage, a positive skin test to egg white can be obtained and they frequently have reagins to egg white in the blood, as shown by the passive transfer technic.

A few of these patients are benefited by the withdrawal of eggs from the diet but in the majority, despite positive skin tests and positive reactions in the blood to egg white, no specific relationship can be demonstrated, clinically. A few cases have even been bene-

fited by the feeding of eggs! Both the origin and the interpretation of the specific skin test hypersensitivity, and the presence of reagins in the blood to egg white in most of these cases are still not satisfactorily explained. Considering these factors, it is not difficult to understand the skepticism of the dermatologist to the investigation of the allergic dermatoses by skin testing methods. The egg-white situation in infantile eczema is very pointed evidence that not all positive skin tests indicate clinical sensitivity. The egg white reactions in eczema can be compared with the general findings of positive skin tests and the absence of symptoms in the other allergic disturbances. The reverse of this situation is also frequently found, not only in eczemas, but in the other allergies as well. It is not at all uncommon to obtain a history of specific food involvement which can be proven clinically, and yet by no method of skin testing, including passive transfer, can this hypersensitivity be demonstrated.

Despite these conflicting factors, the management of the eczematous child should, along with the other procedures common to dermatological practice, include certain essential allergic studies. Tests properly carried out and properly correlated clinically have been of inestimable value in many cases.

In general, the allergic management of an infant with eczema would be as follows:

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1. A case history as to onset and the effects of the addition of new foods. It is hardly necessary to point out that a good history is one of the most important parts of good clinical work. In the case of allergic disturbances, its importance cannot be over emphasized. At this point it should be mentioned that a haphazard history cannot offset the best of skin testing, since the latter must be correlated with the clinical findings to be of any value.

2. Trial diets in which the main ingredients in the diet are radically changed, such as substituting oatmeal for wheat cereals, tomato juice for orange juice, evaporated milk for less well-cooked milks.

3. Scratch tests with only a few common substances such as egg white, wheat, milk, orange juice, silk, wool, cottonseed, dust, feathers, and animal danders.

4. Following the above scratch tests, if negative, intradermal tests with concentrated extracts should be done for these and all other possible causes. In no case in which we have performed intradermal tests in eczema, using highly concentrated extracts, have constitutional reactions occurred, provided negative scratch tests were first obtained for the above few common factors.

5. Patch testing, if necessary, with silk, wool, orris root, house dust and other possible contactants.

6. The active treatment of a seborrheic condition of the scalp if present. In my experience, one of the most effective methods of treatment for cradle cap is the use of an ointment containing 1% salicylic and benzoic acids. This must not be allowed to touch the face.

After studying a considerable number of eczema infants in the above manner, these practical points have evolved.

Milk

In regard to milk sensitization, one can say that as a rule the onset of eczema in the first few weeks of life is more liable to be a milk sensitivity than when the onset is after three or four months. The antigenic effect of the casein of cow's milk, human and goat's milk, is not species specific. This would account for the failure to benefit a milk case by switching to goat's milk or from human to cow's milk. However, if the sensitivity is due to the albumin or to the globulin fractions of the milk, considerable

benefit may result from such a change in the species of milk. The least antigenic cow's milk preparation is ordinary evaporated milk. This should be tried in every case, regardless of skin tests, and before subjecting an infant to milk substitutes, which on the whole are not as well handled by the digestive tract. Infant feeding sugars, such as matose-dextrin preparations, corn syrup, cane sugar, glucose and lactose are not antigenic. Very rarely, if at all, will there be any benefit from a change in these items.

Egg

As mentioned above, the situation is very confusing. Clinically, an egg free diet is worth while for a short trial, but the presence of a positive skin test does warrant too much optimism, except as an indicator that the child might react by skin tests to most of the other factors to which it is allergic.

Cereals

Very definitely and frequently cereals are involved. No doubt, because of this, many dermatologists on empirical grounds have reduced the carbohydrate intake of their eczema patients with good results. A very practical point in this connection is that one may get a positive reaction to only one cereal, very frequently wheat, and yet, by clinical trial, many other cereals are involved. One cannot emphasize too strongly that too great a reliance on skin tests is as unproductive as too great a reliance on any other laboratory report. As clues, they are of great value when properly correlated between allergist, dermatologist, and pediatrician. In this connection, the following case was very instructive. This was an eighteen-months old female infant in whom intradermal tests were performed for every possible factor. Wheat and egg white were the only ones showing by the intradermal method. When these were withdrawn, and oatmeal and barley substituted, the child became worse. When every cereal was withdrawn, including potatoes, the child was miraculously better. By the addition of one cereal at a time it was found that the only cereal that did not produce eczema was rice. Subsequently it was possible to obtain positive reactions to some of the other cereals but not to all of them, even though they were the ones producing definite clinical re

lapse. In this case the presence of a positive wheat test was a most valuable clue to a multiple cereal sensitivity.

Inhalants and Contactants

It has been shown definitely that allergens can affect the skin by inhalation. This is particularly true in the case of silk, which is very important as an inhalant and as a contactant. In the presence of a positive skin test to silk, it may not only be necessary to remove all silk wearing apparel, but it is often necessary to produce a silk free environment in the home. This is an exceedingly difficult, and sometimes impossible, prescription. We have very definitely observed in two cases that the eczema would clear up as long as the child was kept isolated in a silk-free room, provided the attendants who entered the room wore absolutely no silk. But when these children were allowed into the house where silk was present in some of the furniture and in some of the wearing

apparel, a relapse occurred. This may be one of the reasons why some of these children clear up in the summer, when they spend so much of their time out of doors away from other inhalants also, such as orris root, dust and wool.

The chief items for which patch tests would be done in eczema are silk, orris, cotton, rayon, dust, and wool. These act by inhalation as frequently as by contact. This is not a new viewpoint in the handling of eczemas but is a point frequently overlooked, with consequent failure.

It has been my intention in this paper to present to you a few of the practical points which may be of help in handling the difficult problems of infantile eczema. The subject has been considered in a rather general way. In practice, however, I would urge that each case be treated very individually and that allergist and dermatologist cooperate to the fullest extent.

A STUDY OF THE EFFECT OF THE USE OF IODIZED SALT ON THE INCIDENCE OF GOITER

First Official Report of the 1935 Goiter Survey of Michigan

By The Advisory Committee of the Pediatric Section of
The Michigan State Medical Society

The history of endemic goiter has been reviewed so many times that it is unnecessary to discuss it here. We present as brief and, at the same time, as comprehensive a history as possible, of the activities of what has come to be known as The Iodized Salt Committee since its appointment at the inaugural meeting of the Pediatric Section of the Michigan State Medical Society held at Flint, June, 1922.

The belief that lack of iodine is in some way connected with the incidence of simple endemic goiter is world-wide and the beneficial effect of iodine in this form of thyroid enlargement is of well-founded ancient origin. No one has unequivocally proved that lack of iodine is the direct cause of goiter.

Since the work of Marine, efforts have been made to give iodine in some form to school children living in the well-known goiter districts. Two methods of administration had been in vogue before the introduction of iodized salt; drops of saturated sodium or potassium iodide solution, and iodide tablets (iodostarine). Neither of these methods met the need, dependent as they were on personnel, on sympathy with or belief in their efficacy, and unavoidable inconstancy of administration. The Committee was anxious to study the question

with the hope of answering it by means of controlled observations carried on over a series of years. A large scale investigation could not be made by the use of drops and tablets,—some other method must be worked out.

Much information had been obtained, particularly by Kimball and his associates, and it was very convincing that children taking small amounts of iodine were not so likely to develop endemic goiter as those who did not take it. In other words, they reacted to iodine in the same manner as did Marine's trout.

The Pediatric Section of The Michigan State Medical Society became interested in

putting into operation some state-wide method whereby all children in the state, no matter what their social status, would receive the proper amount of iodine, or the amount they would under normal conditions receive, should they happen to live in a non-goitrous district where iodine is present in the drinking water and the vegetation. There were only two avenues through which this could be accomplished,—the water and the salt supplies. To iodize all drinking water would be too expensive and through this avenue we would reach only children who lived in towns or villages where public water supplies were maintained. Salt, being a food essential to life, inexpensive, and its per capita consumption comparatively small, appealed to us as being the avenue of choice. It also had the advantage of having been tried, though abandoned, in Switzerland. One of the Committee had made observations on the approximate yearly per capita consumption of salt. He had placed it at about five pounds and had figured out the approximate amount of sodium iodide that would be necessary to add to the salt to insure that each consumer would receive the equivalent of two milligrams of iodine a day or about 730 milligrams a year, a total of 12 to 14 grains. It seemed that this infinitesimal amount of iodide could not cause harm to anyone whether they were ill or well. However, because of this possibility, the Committee decided to make a careful study of the effect of these small amounts of iodine on the organism in health, and particularly in the abnormal states of hyperthyroidism and toxic adenoma of the thyroid; the possible objectionable effect it might have in the preparation of food, butter, meat, et cetera; such as discoloration and change in taste, that might seriously militate against its general adoption. The Committee also wished to investigate the iodine content of water and vegetation in the state. A report of these studies will be found in *THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY* for April, 1924.

At the termination of our first year's study the results of our work were communicated to the House of Delegates at the 1923 Grand Rapids meeting. Permission was asked and granted to carry on our activities for another year and to again report. This second year was to be devoted to the securing of the cooperation of the salt man-

ufacturers, and the State Department of Health, the launching of an extensive educational campaign and the manufacture of a product to be placed on the market.

Several conferences were held with representatives of the Michigan Salt Producers Association. They were thoroughly instructed in all phases of the goiter problem. Methods of large scale manufacture, worked out by our Chemist, Dr. William J. Hale, of the Dow Chemical Company, Midland, were discussed; and samples of the salt containing varying amounts of iodide demonstrated. Information was secured for and furnished to them concerning many important questions that might arise, suggested by the contemplation of the alteration of so universal a food commodity; as for example, what might be the effect of the iodized salt on animal hides. The public service our combined efforts would render was stressed and this particularly appealed to the salt men. They put forth every effort to assist us in having placed on the market an iodized salt that cost only a few pennies more than the uniodized product.

Educational propaganda was organized through the aid of the profession; the Extension Division of the University of Michigan under the leadership of Professor W. D. Henderson; the press and the advertising departments of the salt manufacturers and salt distributors.

The Committee prepared an outline* containing all necessary information for the preparation of a lecture on goiter and its prevention, with an index for ready reference to factual information. Sets of lantern slides illustrating all phases of the goiter problem were prepared and shipped to speakers in all parts of the state. Speakers confined their remarks to material contained in the outline and by this means uniform information was dispensed to the citizens of the state. The approved list of speakers included the names of over 170 physicians, all of whom were members of the Michigan State Medical Society who gave freely of their time. The talks were given before luncheon clubs, women's clubs, parent-teacher association groups, and schools. An intensive educational program was introduced into the schools of the state.

The Press rendered every service pos-

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sible, giving prominent exhibition of all information on the subject in the same spirit that actuated us all, the rendering of worthwhile public service for the benefit of the general health of the citizens of our state.

The second phase of our work proceeded so rapidly that it seemed advisable to have the iodized salt placed on the market before the coming meeting of the State Society. A satisfactory product had been manufactured and tested out by the members of the Committee, who put it into general use in their homes. To this end, March 12, 1924, a referendum was sent to the members of the Council, by Secretary Warnshuis, for the purpose of securing permission to issue an approval certificate to the salt manufacturers to be placed on all packages of iodized salt. The certificate proposed by the Committee and adopted by the Council March 15, 1924, is as follows:

APPROVAL CERTIFICATE

This salt contains .01 per cent Sodium Iodide, the amount approved by the Council and advocated by the Pediatric Section of The Michigan State Medical Society as a preventive of Goitre. *Individuals using this salt must not take other preparations of iodine without the advice of their physician.*—Signed—

The Committee.

TO BE EFFECTIVE, THIS SALT MUST BE USED FOR COOKING AS WELL AS FOR TABLE USE.

In the analyses of your salt, indicate the amount of Iodide it contains.

Again desirous of securing the coöperation of the State Department of Health, Chairman Cowie wrote to Commissioner Olin, under date of March 15, 1924, as follows:

"My dear Doctor Olin:

It has been the desire of the advisory committee of the Pediatric Section of the Michigan State Medical Society to have you attend one of our meetings and present to you the results of the work we have carried on since our meeting with you in Grand Rapids last September.

If it would be more convenient for you to have us meet in Lansing, we will be glad to do so, with the hope of having the opportunity of seeing your department. All the members of the committee are enthusiastic over the splendid Goiter Survey you have made.

May I hear from you at your earliest convenience so I can call the men together?

We could meet the latter part of next week, the 21st and 22nd, or the first part of the following week.

I beg to remain,

Very truly yours,

DMC:LD

(Signed) D. MURRAY COWIE."

Dr. Olin replied as follows:

March 17, 1924.

D. Murray Cowie, M.D.,
320 S. Division Street,
Ann Arbor, Michigan.

My Dear Dr. Cowie:

Friday, March 21st, will be satisfactory for a conference with your committee in Lansing.

The Advisory Council of this Department and the committee of the State Medical Society appointed to coöperate with the Department will also be here.

Very truly yours,

(Signed) R. M. OLIN

R. M. Olin, M.D.,
Commissioner.

RMO/j

The conference at Lansing resulted in the acceptance of the Committee's plan to advocate the use of Iodized Salt as a goiter preventive. Commissioner Olin was of the opinion that the amount of iodide suggested was too low. Our chemist, Dr. Hale, pointed out that it would be impossible, particularly at first, to approach anything like an absolutely correct formula. He suggested a minimum of .01 per cent and a maximum of .02 per cent. Dr. J. D. Bruce put the motion that was adopted: "The salt to contain a minimum of one one-hundredth of one per cent and a maximum of two one-hundredths." Accordingly, the certificate we had issued remained the same with the exception of the added figures ".02 per cent." The salt was now on the market and propaganda in full swing.

It was fortunate that a very careful and excellent survey of the incidence of goiter in four counties located diagonally across the state, and in the city of Grand Rapids, had been completed by the State Department of Health under Commissioner Olin's direction, with Dr. O. P. Kimball of Cleveland in charge of the field work. The counties were chosen on the basis of a survey of the drinking water of the state—"two counties having no iodine in their drinking water and two with as high an iodine content as Michigan affords." Without this survey as a control background our very large-scale observation could not have been satisfactorily carried out. A survey of the school children of Detroit was "outlined and directed" by Dr. Kimball and a survey of the school children in Muskegon by Dr. F. B. Marshall.

It was the desire of the Committee to have a careful re-survey made at the end of a ten-year period of the general use of Iodized Salt. When this time arrived no funds were available for the State Department of Health

USE OF IODIZED SALT—GOITER SURVEY

TABLE I.

County or City	1924 %	1928 %	1935 %	Per- centage Decrease	1935 Survey Conducted by
Houghton County.....	64.4		15.8	74	Committee & State Dept. of Health
Wexford County.....	55.6	17.2	12.2	78	Committee & State Dept. of Health
Midland County.....	32.7	8.8	5.2	81	Committee & State Dept. of Health
Macomb County.....	26.0		3.6	86	Committee & State Dept. of Health
Grand Rapids.....	30.0	9.0	3.0	90	Committee & State Dpet. of Health

to conduct a re-survey, and expected assistance from the Federal Government, negotiated by Commissioner Slemmons, was not forthcoming. Efforts were made by the Committee to secure funds from private sources. At the end of a year's effort these were provided by the combined contributions of the Michigan Salt Producers' Association (\$600.00); the Dow Chemical Company (\$400.00); the State Department of Health, three doctors; the Department of Pediatrics and Infectious Diseases of the University of Michigan Medical School, one instructor, and the Children's Center at Marquette, and one doctor to assist with the survey in Houghton County.

We were also fortunate to be able to secure the services of Dr. O. P. Kimball of Cleveland at a reasonable figure to take charge of the field work, thus making the method of examination and the grading of the thyroid enlargement found comparable with that of the first survey, which was under his supervision. It was his duty to instruct all workers in the details of the survey and to remain with them until he was sure they were doing the work properly. A new factor had to be added to this survey: that of securing as much information as possible concerning the incidence of goiter among users and non-users of iodized salt, as appears in the following analyses.

The Survey was made during October and November, 1935. The cards were taken to the Department of Health, Lansing, where the first tabulation was made. After careful consideration at Lansing (Drs. Slemmons, Miner and Cowie) it was decided to send all the cards to Ann Arbor where Dr. Cowie would have them re-checked and all possible information contained on them tabulated according to a scheme he had submitted to the Committee. He associated Dr. Harry Towsley with him in this work. It was the desire of the Committee and Dr. Slemmons, Commissioner of Health, to have

these cards examined very critically whether favorable or unfavorable to the use of Iodized Salt. This was done. Our final results follow.

Goiter Incidence Among School Children in Michigan Before and After the Introduction of Iodized Salt

Table I records the percentage of goiters discovered in the various surveys conducted in the Counties of Houghton, Wexford, Midland and Macomb, and in the City of Grand Rapids. A marked decrease in the number of cases of thyroid enlargement is shown in all places. The percentage decrease varies from 74 to 90. The counties showing the smallest goiter incidence in 1924, Macomb and Midland, continue to show the smallest percentage in 1935. It will be recalled that in these places appreciable amounts of iodine are present in the drinking water. The parts per billion in the water of the four counties according to Dr. Young's (State Department of Health) analysis in 1928, was Macomb 8.7, Midland 7.3, Wexford 0.5 and Houghton 0.0.

The Committee steps outside its bounds to comment on the figures so frequently quoted, from the City of Detroit, because they are so closely related to its own work; i.e., a study of goiter incidence in Michigan and an inquiry into the possible effect of the ingestion of iodized salt in bringing about a change in goiter incidence. These Detroit figures are very striking; they show a decrease in goiter incidence among certain groups of school children from 35 per cent in 1924 to 1.4 per cent in 1932. To familiarize ourselves with the details of the four Detroit surveys we sought the coöperation of the Detroit Department of Health. Dr. Don W. Gudakunst, Director of School Health Service, has kindly furnished the information desired. We find that the subsequent Detroit surveys were carried out in an entirely different way than the one made

USE OF IODIZED SALT—GOITER SURVEY

TABLE II. RELATION OF IODIZED SALT INGESTION TO GOITER INCIDENCE IN MICHIGAN 1935

Classification	Houghton County %	Wexford County %	Midland County %	Macomb County %
Using Iodized Salt now	12	3.4	1.8	2.2
Not using Iodized Salt now. Have used it.....	22	24.2	13.4	7.8
Never have used Iodized Salt	25	32.9	14.6	7.7
Percentage decrease in Goiter in eleven years.....	74	78	81	86

under Dr. Kimball's direction in 1924. They were not especially carried on to establish the exact goiter incidence. Commenting on their tabulation of goiter incidence in certain elementary, Junior High and Senior High Schools, Dr. Gudakunst states: "The examination as conducted by Dr. Kimball (1924) did not, of necessity, yield the same percentage of abnormal findings as the routine examination conducted by the school physicians. At that time our school examiners examined children at a very rapid rate; at times one man would examine as many as seventy-five or more in an hour. This examination, of course, would not be complete but would include nose, throat, teeth, tonsils, palate, cervical glands and thyroid. When Dr. Kimball made his inspection he confined his attention to the single point of thyroid. While I have no documentary evidence, I distinctly recall visiting several schools with Dr. Kimball in 1924, and his percentage of palpable thyroid enlargements was very high."

A number of irregularities occur in the Detroit goiter tabulation under consideration. Dr. Gudakunst remarks, "I have no explanation to offer for the irregularities occurring in this table except to suggest that as time went on, our examiners have become more critical in their approach—with the decrease in the numbers of goiters, more diligent search has been carried on. However, in recent years (since 1928) practically all children examined in school have been referred to the school physician following a screening inspection by the school teachers. We no longer examine all children of certain set arbitrary grades, but only those whom the teachers find have indications of one or more physical defects." If we accept the figures from the Detroit School Health Service that have been published, illustrating the decline of

goiter incidence in Detroit, we must likewise accept the figures obtained in the same way at the time Dr. Kimball found the goiter incidence to be 35 per cent. By reference to Dr. Gudakunst's table we find the incidence of goiter at that time was 4.9 per cent and in the previous year 2.9 per cent. Accordingly, until a re-survey is carried on in Detroit comparable with Dr. Kimball's first survey, there are no statistics from Detroit that can be used to show a change in goiter incidence.

The Relation of Iodized Salt Ingestion to the Incidence of Goiter

The foregoing information is significant and it appears in itself convincing. However, from this data alone, we cannot say positively that iodized salt is responsible for the change; more information is needed. To this end we placed on the survey cards the question, "Are you using Iodized Salt now?" Answers to this question included the records of children having used iodized salt continuously for at least six months previous to the time of the survey. This is a more unbiased test than to include only children who had used the salt continuously for two years. Therapeutically, we know that we do not have to wait six months to see a decrease in the size of simple goiter from the use of iodine. Including those who have used it for only six months prior to the survey also makes a more rigid case for iodized salt. It brings a few more goiters into this classification. There were 20,785 children in this group.

It was equally as important to secure information on the incidence of thyroid enlargement among children not now using iodized salt but who at some time within nine years, up to one year before the survey, had used it.* It was thought that these data

*Not using Iodized Salt now. Have used it.

USE OF IODIZED SALT—GOITER SURVEY

TABLE III. SURVEY OF HOUGHTON COUNTY

	Number of Children Examined	Children Without Goiter No. 1	Children With Goiter Small No. 2	Children With Goiter Moderate No. 3	Children Congenital With Adenoma	Children With Thyroid Hyperplasia	Total With Goiter	Percentage of Children With Goiter
Using Iodized Salt now. . . .	4984	4383	457	4	20	120	601	12.0
Not now using Iodized Salt. Have used it.	1845	1436	208	6	17	178	409	22.1
Never have used Iodized Salt.	1193	890	191	4	11	97	303	25.4
No information on cards as to the use of Iodized Salt. .	743	667	72	3		1	76	10.2
Total.	8765	7376	928	17	48	396	1389	15.8

TABLE IV. SURVEY OF MIDLAND COUNTY

	Number of Children Examined	Children Without Goiter No. 1	Children With Goiter Small No. 2	Children With Goiter Moderate No. 3	With Children Congenital Adenoma	Children With Thyroid Hyperplasia	Total With Goiter	Percentage of Children With Goiter
Using Iodized Salt now. . . .	3172	3112	40		4	16	60	1.8
Not now using Iodized Salt. Have used it.	565	489	57		2	17	76	13.4
Never have used Iodized Salt.	697	594	82		3	18	103	14.6
No information on cards as to the use of Iodized Salt. .	617	592	24			1	25	4.0
Total.	5051	4787	203		9	52	264	5.2

TABLE V. SURVEY OF WEXFORD COUNTY

	Number of Children Examined	Children Without Goiter No. 1	Children With Goiter Small No. 2	Children With Goiter Moderate No. 3	Children With Congenital Adenoma	Children With Thyroid Hyperplasia	Total With Goiter	Percentage of Children With Goiter
Using Iodized Salt now. . . .	2107	2034	63		6	4	73	3.4
Not now using Iodized Salt. Have used it.	795	602	120	1	3	69	193	24.2
Never have used Iodized Salt.	541	363	98	6	7	67	178	32.9
No information on cards as to the use of Iodized Salt	199	187	7		1	4	12	6.0
Total.	3642	3186	278	7	17	144	456	12.2

might give us information concerning the necessity for continuing the use of iodized salt after a period of years. Five thousand six hundred twenty-two children were examined. Table II records this information. From the data here collected it is shown that

the incidence of goiter, or thyroid enlargement, is decidedly lowest among the children using iodized salt. It will also be observed that the incidence of goiter is higher, excepting in Macomb County, among children who have at some time used iodized salt but who

USE OF IODIZED SALT—GOITER SURVEY

TABLE VI. SURVEY OF MACOMB COUNTY

	Number of Children Examined	Children Without Goiter No. 1	Children With Goiter Small No. 2	Children With Goiter Moderate No. 3	Children With Congenital Adenoma	Children With Thyroid Hyperplasia	Total With Goiter	Percentage of Children With Goiter
Using Iodized Salt now...	10522	10276	201		2	43	246	2.3
Not now using Iodized Salt. Have used it.....	2417	2237	136		2	42	180	7.4
Never have used Iodized Salt.....	1610	1486	90		1	33	124	7.7
No information on cards as to the use of Iodized Salt	836	820	15			1	16	1.9
Total.....	15385	14819	442		5	119	566	3.6

TABLE VII. GRAND RAPIDS SURVEY

	SCHOOL CHILDREN							
	Number Examined	Without Goiter	With No. 2 Goiter	With No. 3 Goiter	With Congenital Adenoma	With Thyroid Hyperplasia	Total With Goiter	Percentage With Goiter
Using Iodized Salt now...	20811	20324	428	1	12	31	487	2.3
Not using Iodized Salt....	6474	6132	267	1		24	342	5.3
Indefinite.....	1523	1482	33			6	41	

have not used it for six months preceding the survey,* and that it is still higher among children who have never used iodized salt. One might reasonably conclude that continuous use of iodized salt is necessary during the developmental period.

Type of Thyroid Enlargement Encountered in School Children in Michigan

We were also desirous of knowing something about the type of thyroid enlargement present in the school children. Tables III, IV, V, VI and VII record the number of children examined in each county, and the City of Grand Rapids, the number showing thyroid enlargement and the types of thyroid enlargement. The criteria used are as follows:

1. *The Normal Thyroid.*—In 1916 David Marine standardized the normal thyroid of an adult as one that does not exceed 0.5 grams per kilogram of body weight. He determined that the average adult thyroid weighed between 20 and 35 grams. "Correspondingly an adolescent" would have a thyroid weighing 15 to 30 grams (Kimball). Dr. Marine further estimated that each adult lateral lobe is approximately the size of a

medium-sized lima bean and that the isthmus can hardly be palpated. In the first goiter survey in Michigan (1924) if the lateral lobes of a child could not be palpated the thyroid gland was said to be normal.

2. *Small Goiter.*—If the lateral lobes could be palpated but were small, and if they were soft and spongy, it was designated a small goiter, and classed as No. 2. This group included everything from a distinct enlargement of the gland to a visible goiter, in which one or both lobes caused a definite bulging of the neck and in which the median lobe, or isthmus, could be easily demonstrated; i.e., from one-half to one inch in thickness. In such a goiter there may be as much as ten times the amount of a normal gland.

3. *Moderate Goiter.*—If the thyroid enlargement was definitely deforming, causing a bulging of one or both sides of the neck it was called a moderate goiter and designated No. 3.

By reference to the tables it is seen that the bulk of the thyroid enlargements found, fall in Group 2. They are small goiters.

USE OF IODIZED SALT—GOITER SURVEY

TABLE VIII.

Group	Number	Number With Goiter	Percentage With Goiter
Children using Iodized Salt at time of the survey.....	20785	980	4.71%
Children who have used Iodized Salt at some time up to within six months of the survey.....	5622	858	15.26%
Children who have never used Iodized Salt.....	4041	708	17.52%
Total Children Examined.....	30448	2546	8.36%

There was another type of enlargement occasionally encountered which was designated:

Thyroid Hyperplasia.—This was judged solely by the physical findings. It is a question whether this type of thyroid enlargement could always be satisfactorily differentiated by physical examination alone. One is impressed with this difficulty when the criteria used in other surveys are carefully weighed. While “hyperplasia and uniform colloid enlargement” has been accepted to “mean iodine deficiency” it would seem best to include the 711 thus classified* with the 1885 in the colloid goiter groups, bringing its total to 2,596. We are, however, leaving the tables to record the information contained on the survey cards.

Congenital Adenoma.—If a distinct nodular mass could be felt within the lobe and if it was associated with a persistent thyroglossal stalk, it was called a congenital adenoma.

No Information on Cards as to the use of Iodized Salt.—The group of children examined and classified under “No Information on Cards, et cetera” is of significance only from the standpoint of the computation of the total number of goiters found among this large group of school children.

The Incidence of Thyroid Enlargement Among Children Who Have Never Used Iodized Salt

By reference to Tables III, IV, V, and VI one is impressed with the general decline in goiter incidence since the introduction of iodized salt. This is so whether the children are users or nonusers of the salt. We are particularly interested in the marked decline

among the children who state on their cards that they have never used iodized salt.

The individual analysis of the four counties shows a gradation in goiter incidence. The greatest reduction is in those children using the salt at the time of the survey, and there is a slightly greater reduction in those children who have at some time up to within six months of the survey used it over those who have never used it. If we add together these two groups and determine the goiter percentage (16.26) we find there is only a difference of 1 per cent (Table VIII). In Midland and Macomb Counties, there is practically no difference in the goiter incidence in the two groups. This lends support to the belief that the use of iodized salt must be continued through the period of adolescence at least.

It is difficult to explain the reason for the marked decrease in goiter incidence among the children who have never used iodized salt. It seems that the same reason must be that which causes the group who have discontinued its use to show practically the same incidence. It is not improbable that these children were unconsciously using iodized salt at least part of the time. When one asks for salt at the grocers in Michigan he is perhaps more likely to be given iodized salt. Wholesalers and our educational propaganda have encouraged them to do so. Dr. Miner has been endeavoring to collect some trustworthy statistics with the aid of Mr. Morse, Secretary of the Michigan Salt Producers Association, on the comparative sales of iodized and ordinary salt. This information is not yet available. It will be considered in a subsequent report.

While we bring very convincing evidence that this small amount of iodine very greatly prevents the occurrence of thyroid enlargement in children, we have not proved that iodine deficiency in the water and vege-

*Excluding the group—“No information on cards as to use of iodized salt.”

tables is the direct cause of endemic goiter. There has been a belief for many years that infection is the cause of endemic goiter and at the present time, among those who do not question the prophylactic value of iodine, there is a strong feeling that infection is directly responsible and that it is made possible only through the deficiency of iodine.

We were impressed during the survey with the family incidence of thyroid enlargement. All or several children in a family would show thyroid enlargement. From the viewpoint of infection one might wonder if the decreased incidence occasioned by the use of iodized salt lessened the number of contact infections and that that may have contributed to the decrease of goiter among the nonusers of iodized salt.

In a later communication we hope to report other findings such as age and family incidence, possible adolescent influence, and the comparative use of iodized and non-iodized salt, and a review of the literature on iodized salt since its introduction in Michigan.

The Committee of the Pediatric Section of the Michigan State Medical Society, responsible for the idea of the use of iodized salt in Michigan and for its being placed on the market, first in Michigan and then in the other goiter districts, consisted of five members from the section and the officers ex-officio as follows:

Doctors: D. M. Cowie, Ann Arbor, *Chairman*; G. L. Bliss, Kalamazoo; F. J. Larned, Grand Rapids; D. J. Levy, Detroit; F. B. Miner, Flint, Secretary; T. B. Cooley, Detroit, Ex-officio; Lafon Jones, Flint, Ex-officio.

Associates: Dr. Wm. J. Hale, Midland, Chemist; Mr. Clyde J. Holmes, Jackson, Barrister; Prof. W. D. Henderson, Ann Arbor, Extension Division of the University of Michigan.

The committee has been reappointed from year to year. Dr. Bliss removed to California in 1925, Dr. Larned died in 1928, Dr. Cooley and Dr. Jones became regular members of the Committee in 1925, and Dr. Roy D. McClure was appointed 1934.

The committee responsible for inaugurating and securing the funds for the 1935 survey together with the State Commissioner of Health is as follows:

Committee: Dr. D. M. Cowie, Ann Arbor, *Chairman*; Dr. T. B. Cooley, Detroit; Dr. D. J. Levy, Detroit; Dr. F. B. Miner, Flint, Secretary; Dr. R. D. McClure, Detroit; Dr. E. E. Martimer, Detroit, Ex-officio.

State Department of Health: Dr. Clyde C. Slemons, Commissioner.

Associates: Dr. Wm. J. Hale, Midland, Chemist; Dr. O. P. Kimball, Cleveland; Dr. Harry Towsley, Ann Arbor.

For the prosecution of our organized goiter prevention propaganda campaign, the Committee and the State Department of Health wish to take this opportunity to express their appreciation of the generous response of 170 members of the Michigan State Medical Society, who conducted lectures throughout the State; the Press and the Salt Producers' Association; and for the financial aid of the Salt Producers' Association and the Dow Chemical Company which enabled us to secure the assistance of Dr. O. P. Kimball.

The Committee and the State Department of Health also wish to acknowledge the assistance of members of the Pediatric Staff of the University of Michigan Hospital in conducting the analyses of the survey cards, and the kind coöperation of the county nurses and the Departments of Education of the various counties.

Respectfully submitted,
D. MURRAY COWIE, M.D., *Chairman*

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SEPTEMBER, 1937

*"Every man owes some of his time to the up-
 building of the profession to which he belongs."*

—THEODORE ROOSEVELT.

EDITORIAL

LET US CONTINUE TO BE POSITIVE AND CONSTRUCTIVE TOO

A FEW weeks ago we noted in this JOURNAL some of the highlights of the Capper Bill which was introduced and referred to the Finance Committee of the Senate at Washington, where *requiescat in pace*, let us hope. A more recent attempt to socialize medicine is the bill introduced into the Senate by Senator James Hamilton Lewis of Illinois. The *Journal of the A. M. A.* commented at length on the bill introduced by Senator Lewis—no, comment is not the right word; comment is not necessary. What the *Journal* did was to point out some of the prominent features of the bill and numerous features which were not listed in the bill. An editorial in the *Journal of the A. M. A.* of August 7 gives a clear account

of the purport of the Lewis measure. Perhaps his speech before the House of Delegates at the recent A. M. A. convention at Atlantic City was a prelude or a warning of the measure which he has since introduced into the Senate. All these things mean that the medical profession should not be caught napping, but should be fully conversant with the sporadic attempts to put over socialized medicine.

It is a fact that advocates of anything, no matter how absurd nor how beneficial, will receive a following. The desire of a great many people is for something positive and constructive, even if it be positive and constructive in a questionable sense. Things may be perfectly satisfactory to everyone, yet the agitator will attract more notice, or achieve more notoriety, than the person who is content with things as they are. We still feel that there is no general demand on the part of the people for socialized medicine. If twenty-five or perhaps not more than fifty writers and agitators and foundations and, what have you, were to retain a religious silence, the remaining one hundred and twenty-five million inhabitants of this country would never feel that there was anything to be gained by state control and practice of medicine. However, the agitator is a positive character. He promises something and those who feel that they have not a great deal at stake are willing to fall for promises.

The medical profession may be just as positive, not for socialized medicine, not for the *status quo*, but in promise and performance of the highest possible grade of medical care. The attainment of such an ideal is possible only when doctors qualify and familiarize themselves with the latest developments and advances in medicine and surgery.

PHYSICIANS AND FIRST AID

IT IS understood that in some instances, unions have favored the idea of qualified licensed physicians to take care of first aid and injuries in a number of industrial plants. In others, big companies have initiated a program whereby all erstwhile first aid attendants who were not licensed to practice medicine are being transferred to other departments in the plant which have

nothing to do with the medical care of the injured and doctors on full and part time are being engaged in their places. This move, however, while it will be doubtless agreeable to the working men is occasioned by increased complexity of the industrial medical situation brought about by the enactment of the Occupational Diseases Law. Where an intelligent layman or nurse might be trained to bandage up a wound, it is unequivocally the function of a physician to differentiate between occupational and non-occupational diseases. The Occupational Diseases Law has far-reaching possibilities in the way of preventive as well as curative medicine. The wise industrial physician will not attempt to do too much but will seek the coöperation of the family physician and the relations of the two, the industrial physician and the general practitioner, should be one of common understanding.

OCCUPATIONAL DISEASE LAW

THE new Occupational Disease Law will come into effect on October first, before which date it will be necessary to examine employees in various industries for diseases caused by dust, gas and other hazards. This, of course, means routine examinations of chests. A great deal of emphasis has been laid upon the subject of silicosis. Pneumoconiosis is the general term which includes silicosis, a condition produced by the presence of a silicate or quartz dust inhaled from grinding and other operations, and anthracosis, a condition in which coal dust is inhaled into the lungs. The danger of asbestosis consists of the quantity of inorganic dust inhaled showing its close relation to silicosis. It is not a shadow of an inorganic particle that is seen in a radiograph in instances of pneumoconiosis, but a small spot of fibrous connective tissue, or fibrotic nodules, varying in size from a pinpoint to a pea. Of course, an x-ray examination is by far the best diagnostic procedure in determining the presence or absence or the severity of any one of these conditions. The impression of roentgenologists who have examined chests for decades is that silicosis is not very common and that there is a danger of too much importance attached to it at this time where examinations must of necessity be made on a large scale. The ex-

ception of course is the roentgenologist located in a mining center or near quarries or stone cutting industries. Our advice, then, is that physicians and employers should not become hysterical over the matter.

While making this assertion, we cannot help but feel that the roentgenologist is placed in a very important position, one calling for discernment as well as judicial attitude towards the whole subject, which not even a judge may exercise in these cases. A working man may have performed his duties with satisfaction to his employer for a number of years and may feel absolutely capable of doing so for many more years. Yet an x-ray examination may reveal adventitious foci in which small particles of dust are fibrously incapsulated, and at the time perhaps of no clinical significance. To make a diagnosis of silicosis without an accurate evaluation of its clinical significance, means depriving the employe of work and thereby perhaps making him and his family welfare charges, which is not only an expense to the state, but a means of destroying the morale of the employe and his dependents. On the other hand, to pass or to overlook a case which may be fruitful soil for some form of pulmonary infection, tuberculous or other, which is compensable, will prove an injustice to the employer. The situation calls for the highest degree of competency and skill as well as judgment on the part of the roentgenologist. To repeat, however, cases of incapacitating pneumoconiosis in the experience of most roentgenologists have been rare.

Study the law as printed in the July number of this JOURNAL (pages 491-494). There is a possibility that there will be a period of trial and error with Supreme Court decisions and amendments before an ideal occupational disease law is possible. This statement is not a criticism of the present law.

THE STATUS OF THE INSANE AND MENTALLY DISEASED

IN this number of the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY is presented an abstract of the Michigan law governing the care and treatment of the insane and mentally diseased in this state. Physicians will find this digest to contain important information inasmuch as it may be

their duty to aid in the commitment of patients to state institutions. The details of procedure of commitment of patients to the various institutions for the care of the insane or mentally ill are clearly presented.

Probably of even greater importance is the way in which the legal status of a person so committed and afterwards dismissed as cured is effected. The law states clearly that the person once committed to a state hospital is not restored to legal soundness of mind, however, until probate court action has made such a declaration. This is very important. Without this declaration by the probate court, the person who has been committed to an institution for the care of the insane and has returned home, is denied the power to execute a contractual agreement, or to get married, or to transfer property, though he may exercise the right of franchise. The technic of declaration of mental sanity is given in the digest of the law.

MICHIGAN DEPARTMENT OF HEALTH

ITEMS of news value, given out officially by the Michigan Department of Health, have appeared regularly in this JOURNAL for many years. The budget of items which appears in this number is of particular interest. First are presented an announcement of the refresher courses in obstetrics to be given in the Upper Peninsula this fall. This is of particular concern to those physicians practicing in this area.

Much important legislation concerning public health in Michigan has been enacted during the past session of the legislature. Three acts embodying important changes in the laws governing tuberculosis. These changes have been in the nature of simplification. Certification is the responsibility of the local health officer and there has been elimination of the requirement for financial investigation. A new law takes care of the carrier of the infection who rebels against proper treatment or isolation for the protection of his family or the public. There is no change in the law regarding the relationship of private patient and physician.

The antenuptial physical examination law has been widely commented upon by the lay press. It is estimated that approximately 100,000 persons, annually, will present themselves to physicians for physical exam-

ination. All laboratory tests must be made by the Michigan Department of Health laboratories or by laboratories registered by the State Department of Health. Those specimens sent to Lansing will be examined free of charge, which, of course, places the private, independent laboratory at a disadvantage, which some are likely to resent.

The various laws which pertain to the work of the physician have been printed, or will be printed in the JOURNAL. Each physician should familiarize himself with them.

"Factors Involved in Satisfactory Shaving" is the title of a paper which appeared in a recent number of the *Journal of the American Medical Association*. We are wondering whether this is an atavistic throw-back to the days of the barber surgeon.

Socrates never professed to be a teacher. Neither did he profess to be wise. He acted as a student. He talked with all manner of people in the marketplace, asking them questions.

There was no such thing as free speech in those days. Independent thinkers were put to death. But Socrates by means of his question system, escaped being put to death until he was seventy-one. He was the first man who taught by asking questions. He made the ancient Grecians think and they made the world think.

Any man who is in a managerial position, or who is trying to influence others, should ask many questions. Teach by questioning—that is what Socrates did. He gave us a tip that has never been forgotten. Any business man will find that it is very useful.—HERBERT N. CASSON, (Editor) in the *"Efficiency Magazine."*

GI' US A LAND

Oh, gi' me a land where the men are real men,
Where they live by the old golden rule,
Where the constitution is easy to ken
And respected by knave and by fool.

Oh, gi' me a land where the people are proud
And worship none other than God,
Where ego and idols are lost in the crowd
And no one is subject to fraud.

Oh, gi' me a land where the loafers may starve
If they're no very willing to work,
If they won't sweat their brow in the niche they
must carve
They're minus the amount that they shirk.

Oh, gi' me a land where the senate awoke
To leaving the people alone,
Where the best governed folk are the least governed
folk
And taxes are cut to the bone.

Oh, gi' me a land where a culture prevails,
Where business is keen and upright,
Where science and arts and language and tales
Establish a beauty and might.

WEELUM.

JOUR. M.S.M.S.

THE LAW GOVERNING THE CARE AND TREATMENT OF THE INSANE AND MENTALLY DISEASED IN MICHIGAN

By HENRY A. LUCE, M.D., *Medical Director
Michigan Society for Mental Hygiene*

ACT No. 104, PUBLIC ACTS OF 1937, passed by the Michigan Legislature at the 1937 Session, amended and revised the laws governing organized hospitals for the insane, homes and schools for feeble-minded and epileptic, and problems arising in relation to insanity and mental diseases. These regulations are of importance to all members of the medical profession and the purpose of this article is to make available to the profession the principal facts, in order that the private physician may serve his public better.

The control and administration of the state's activities along the lines of mental health and disease is vested in a commission of seven members not more than four of whom shall belong to the same political party, appointed by the governor and confirmed by the Senate. The commission shall appoint and employ a *director* who will act as secretary and shall devote his entire time to the office. This director must be a physician legally registered in Michigan with three years' experience in mental disease.

The following as designated are placed under the jurisdiction of the Commission:

Kalamazoo State Hospital,
Pontiac State Hospital,
Traverse City State Hospital,
Newberry State Hospital,
Ypsilanti State Hospital,
Ionia State Hospital (for the insane, who have committed or attempted to commit certain crimes),
Michigan State Hospital for Epileptics, Wahjamega,
Lapeer State Home and Training School for the Feeble-minded,
Mt. Pleasant State Home and Training School for the Feeble-minded,
Michigan Children's Village for Mentally Deficient Children, (above the imbecile level) Coldwater,
and all similar institutions which may hereafter be established.

The Commission has jurisdiction and control of all the above institutions. The whole Commission shall hold not less than ten meetings each fiscal year and must make an effective inspection of each institution at least twice a year. Monthly inspections must be made by members of such Commission duly appointed by the Commission for such purpose. The Commission appoints the executive heads (medical superintendents) of each institution and its approval is necessary for such assistant medical superintendents and necessary assistant physicians (one or more of whom shall be a woman in those institutions having more than fifty female patients), as may be recommended by the medical superintendent. The medical superintendent also appoints all other assistants, attendants and employees subject to the approval of the Commission.

Private hospitals in which any person who is insane, feeble-minded or epileptic, is received for custody, care or treatment, must be licensed. Such licenses must be renewed annually at a fee of \$10.00. Private hospitals are under the supervision and con-

trol of the State Hospital Commission whether they receive patients for hire or through Probate Court commitment.

The Commission is further authorized to undertake and promote studies of the cause, nature and the methods of care, treatment and prevention of insanity, feeble-mindedness and epilepsy and to develop and conduct a state wide mental hygiene program, with emphasis upon the promotion of mental health and the prevention of insanity, feeble-mindedness and epilepsy.

Patients are divided into three classes:

1. Public patients, persons who are kept and maintained at the expense of the state or county.
2. Partial pay patients, who are kept and maintained partially at the expense of the state or county, but who partially pay for their maintenance or partially reimburse the state or county for the cost of maintenance.
3. Full pay state or county patients, who are kept and maintained by the state or county but who reimburse the state or county fully for the expense of maintenance.

The county departments of public welfare upon request of the probate judge, prosecuting attorney, auditor general or attorney general shall investigate the ability of the mentally diseased person and his relatives who are liable for his support, to pay the expenses of his hospital care and treatment, and shall make a report of any such investigation to the person requesting the same.

If it appears that the patient is in the partial pay or full pay class, the court issues a citation to such relatives and to the supervisor of the township or an alderman of the ward in which the patient has a legal residence to show cause why the petition should not be granted. At the hearing, if the court decided that the state should receive partial or full pay from the relatives or estate, he may order the payment of such sum or sums as he may find they are reasonably able to pay. In case of failure to pay the ordered amount the attorney general shall proceed by action to collect such sum.

Patients may be either committed patients or voluntary patients.

Requests for the commitment of a person may come from the father, mother, husband, wife, brother, sister, child, if of legal age, guardian, sheriff, Superintendent of the Poor, Supervisor of Township, County Agent, any peace officer, or any other person whom the Judge feels would be a proper person to make such request.

Persons who are addicted to the excessive use of intoxicating liquors or narcotics or noxious drugs, for whom a guardian has been appointed with power to restrain, may (upon petition of the guardian, supported by the certificate of two qualified physicians under oath, and the issuance order of commitment of the Probate Court) be committed to an institution for the care and treatment of the insane.

Voluntary patients shall not be detained for more than three days after giving notice in writing of intention or desire to leave such institutions.

Certificates of insanity, feeble-mindedness or epilepsy, must be made by two reputable physicians under oath, appointed by the Probate Court. Neither of such physicians shall be a trustee, superintendent, proprietor, officer, stockholder, or have any pecuniary interest, directly or indirectly, or be an attending physician in the institution to which it is proposed to commit such person. Such physician must examine the alleged insane, feeble-minded or epileptic individual personally. The physician's certificate must show that in his opinion such person

is actually insane, feeble-minded or epileptic as the case may be and shall contain the *facts and circumstances* upon which the opinion of the physician is based (not conclusions), and *show* that the condition of the person examined is such as to require care and treatment in an institution for the care, custody and treatment of such mentally diseased person. For the above services the physician is allowed \$5.00 and mileage.

If the Court deems it necessary or if such alleged mentally diseased person or any relative or any person with whom he may reside or at whose house he may be shall so demand, a jury of six freeholders who possess real estate shall be summoned to make the decision.

Counties are liable for the maintenance of any mentally diseased person for not more than one year during the lifetime of such patient. The state is liable for all other time.

Escaped patients are subject at any time to be returned to the hospital. *The medical superintendent has full power to issue a warrant commanding all peace officers to return such escaped patient to the custody of the hospital from which he escaped.*

The medical superintendent shall discharge any patient falling into anyone of the following five classes:

1. A patient who has been on parole for three years continuously.
2. Any patient whose temporary order shall have expired and for whom no permanent order has been issued.
3. A patient legally transferred to another state or legally deported.
4. A committed patient who in the opinion of the medical superintendent is not insane, feeble-minded or epileptic, at the time of admission to the institution.
5. A patient who has been adjudged sane or otherwise released by a court of competent jurisdiction. (This provision does not apply to patients in Ionia State Hospital, who have been committed by a court of criminal jurisdiction.)

The medical superintendent *may* discharge any patient whose discharge in the judgment of the superintendent shall not be detrimental to the public, nor detrimental to the patient.

The medical superintendent may grant a parole or leave of absence under such conditions as may be prescribed by the State Hospital Commission. *A patient on parole remains in the legal custody of the medical superintendent and is subject to return for any reason satisfactory to the superintendent. Power to issue a warrant commanding all peace officers to return such paroled patients is conferred upon the medical superintendent.*

After the completion of an uninterrupted three-year parole the person cannot be returned to an institution without a *new commitment* Probate Court procedure. *The person is not restored to legal soundness of mind, however, until Probate Court action has made such a declaration.*

There are many individuals in the State of Michigan today, who have been patients in hospitals for the treatment of mental illness and have returned home. Many have the mistaken idea that when they have left the hospital, all their legal rights are restored. It is true that the individual has not been disfranchised, but power to execute a contractual agreement, get married, transfer property, etc., is not legally regained except by Probate Court action.

Sections 29 and 29-A of the Act read:

"Whenever any person who shall have been adjudged insane desires to be declared to be again of

sound mind, a petition may be presented to the probate court making adjudication for a finding and order declaring that such person is at such time of sound mind. Such petition shall be made on forms to be provided by the Court. Upon the filing of such petition the court shall appoint a time for hearing thereon and give notice thereof to the medical superintendent of the hospital, home or retreat to which such patient was committed, or in which such person is or has been an inmate, and to such other persons as the court shall direct. The court shall appoint two registered physicians to examine such person who shall report their findings to the court upon certificate, duly verified, or by testimony in open court, or both as directed by the court and such physicians shall be compensated as provided in this act. The court may receive the testimony of other physicians or lay witnesses as it may deem proper. In the event that the medical superintendent and one other physician who is a member of the staff of the hospital, home or retreat of which such person was or is an inmate shall certify in writing, authenticated by affidavit, to the court that in their opinion such person is again of sound mind, the court may dispense with the appointment of the two physicians hereinbefore provided. Upon the hearing of such petition the court, from the testimony given and certificates filed, shall find:

- (a) That such person has recovered and is of sound mind and is discharged from the custody of the medical superintendent of the institution to which the person had been previously committed.
- (b) That such person is not recovered and is not of sound mind.

The Court shall cause a copy of its finding and adjudication to be sent to the medical superintendent of the hospital, home or retreat to which such person had been previously committed. Whenever any person who shall have been adjudged feeble-minded or epileptic desires to be declared not feeble-minded or epileptic, a petition may be presented to the probate court making adjudication for a finding and order declaring that such person is not feeble-minded or epileptic. The proceedings relative thereto shall be as in this section provided in respect to persons who have been adjudged insane.

Whenever any patient shall have been discharged as recovered from the custody of any institution referred to in this act, the medical superintendent of such institution shall immediately notify the probate court by which the patient was committed that the patient has been discharged from the custody of such institution. Upon receiving such notice, the court shall fix a date for a hearing and cause notice to be sent to the medical superintendent of the institution from which such former patient has been discharged and shall also cause notice to be given to the person who applied for the adjudication of insanity, feeble-mindedness, or epilepsy, pursuant to which the patient in question was committed, if such person be found in such county, and cause such further notice to be given as the court may deem proper. If, upon the hearing, the court, from the testimony given, shall find such former patient to be not insane, feeble-minded, or epileptic, as the case may be, an order shall be entered declaring such finding: *Provided, however, That the court may, in its discretion, require the testimony of at least two reputable physicians in order to establish the mental condition of such former patient and such physicians shall be appointed and compensated by the court as provided in this Act.*

It appears from the above two sections that the patient may be restored to legal soundness of mind

(Continued on page 661)



CONVENTIONS

ALLISON E. SKAGGS—HENRY C. BLACK

Time and again there have been discussions in medical journals urging members of the profession to keep up-to-date through attendance at postgraduate courses and conventions, but how many have considered such activities in their relation to the business side of their practice? Coming from laymen these paragraphs make no attempt to cover the scientific benefits to the doctor and his patients, but present the matter purely from a selfish business standpoint.

Many times you have heard the old saying, "You can not see the woods for the trees," spoken in relation to the man who is too close to his own work to get a broad view of the situation. Working long hours and many times under extreme pressure, the doctor becomes so wrapped up in the care of his patients and their welfare, that it is exceptionally hard for him to get far enough away from the routines of his own practice to realize its trends and its possibilities. If there is anything in the world that will give him the proper perspective it is getting away to medical conventions, talking over his problems with other doctors whose situations are similar, and taking an active part in the attempts at solution of the problems that confront the profession as a whole.

It seems almost universal that the young doctor going into private practice, plunges into activities with a vigor and determination to succeed which causes him to concentrate wholeheartedly on the building up of a substantial practice. As it grows and his time becomes more and more occupied there is less and less time to consider impartially his own financial position. Frequently before debts for education are all liquidated he has contracted obligations for home, office or investments to such an extent that a common response to the question, "Are you going to the State Convention?" is "No, I just can't get away."

Theodore Roosevelt said, "Every man owes some of his time to the upbuilding of the profession to which he belongs." Let us go further and say that time spent in

such work for his profession will ultimately broaden the man himself and give him such a slant on his own activities that it will put money in his pocket. It is an absolute truth that the man who stays at home and works while his colleagues attend medical meetings is no further ahead financially at the end of the year than the man who has taken time to go, and the reason is undoubtedly in the improved mental outlook and the renewed confidence that is obtained through the contacts and inspiration provided at these meetings.

Not only are the programs themselves designed to be of utmost assistance in handling the problems of the individual and of the group, but also the renewed friendships and personal contacts are of great help. The new ideas, the technical exhibits, and equipment shown by the exhibitors, and the opportunity to profit by the experience of other men certainly has a tendency to send the doctor back home with new inspiration, new ideas, and a firmer grasp on the fundamentals of his professional life.

It is impossible to give active support to organized medicine, its aims and its meetings, without receiving far greater personal benefits in return.

CARE AND TREATMENT OF THE INSANE

(Continued from page 660)

without incurring legal expense to himself. When a patient is discharged, it further appears that it is *mandatory* upon the hospital superintendent to notify the court and also mandatory upon the court to set a date for hearing and to render a decision relative to the soundness of mind of the discharged patient.

Neither the State nor any medical superintendent, nor Officers of any institution named in this Act shall be liable to damages for any act of any patient paroled, discharged or escaped therefrom.

Counties may maintain and operate an insane asylum approved by the State Hospital Commission and admit patients in the same manner as is or may be provided for the admission of insane persons to the State Hospital. First year's residence expense is borne by the county; after one year the patient becomes a state charge and the county is reimbursed by the State at a cost not to exceed by more than 20 per cent the per capita cost at the Ypsilanti State Hospital.

The terms "insane" or "insane persons" in the Act, include every species of insanity and extend to every mentally deranged person and to all of unsound mind.

The term "mentally diseased" refers to any person who is insane, feeble-minded or epileptic.

Michigan State Medical Society

Past Presidents 1866-1935



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| 1866—*C. M. Stockwell, Port Huron | 1900—*P. D. Patterson, Charlotte |
| 1867—*J. H. Jerome, Saginaw | 1901—*Leartus Connor, Detroit |
| 1868—*Wm. H. DeCamp, Grand Rapids | 1902—*A. E. Bulson, Jackson |
| 1869—*Richard Inglis, Detroit | 1903—*Wm. F. Breakey, Ann Arbor |
| 1870—*I. H. Bartholomew, Lansing | 1904—*B. D. Harison, Sault Ste. Marie |
| 1871—*H. O. Hitchcock, Kalamazoo | 1905—*David Inglis, Detroit |
| 1872—*Alonzo B. Palmer, Ann Arbor | 1906—*Charles B. Stockwell, Port Huron |
| 1873—*E. W. Jenk, Detroit | 1907—*Herman Ostrander, Kalamazoo |
| 1874—*R. C. Kedzie, Lansing | 1908—*A. F. Lawbaugh, Calumet |
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| 1876—*Abram Sager, Ann Arbor | 1910—*C. B. Burr, Flint |
| 1877—*Foster Pratt, Kalamazoo | 1911—*D. Emmett Welsh, Grand Rapids |
| 1878—*Ed. Cox, Port Huron | 1912—*Wm. H. Sawyer, Hillsdale |
| 1879—*George K. Johnson, Grand Rapids | 1913—*Guy L. Kiefer, Detroit |
| 1880—*J. R. Thomas, Bay City | 1914—Reuben Peterson, Ann Arbor |
| 1881—*J. H. Jerome, Saginaw | 1915—*A. W. Hornbogen, Marquette |
| 1882—*Geo. W. Topping, DeWitt | 1916—Andrew P. Biddle, Detroit |
| 1883—*A. F. Whelan, Hillsdale | 1917—Andrew P. Biddle, Detroit |
| 1884—*Donald Maclean, Detroit | 1918—Arthur M. Hume, Owosso |
| 1885—*E. P. Christian, Wyandotte | 1919—Charles H. Baker, Bay City |
| 1886—*Charles Shepard, Grand Rapids | 1920—Angus McLean, Detroit |
| 1887—*T. A. McGraw, Detroit | 1921—*Wm. J. Kay, Lapeer |
| 1888—*S. S. French, Battle Creek | 1922—*W. T. Dodge, Big Rapids |
| 1889—*G. E. Frothingham, Detroit | 1923—Guy L. Connor, Detroit |
| 1890—*L. W. Bliss, Saginaw | 1924—*C. C. Clancy, Port Huron |
| 1891—*George E. Ranney, Lansing | 1925—*Cyrenus G. Darling, Ann Arbor |
| 1892—*Charles J. Lundy (died before taking office) | 1926—J. B. Jackson, Kalamazoo |
| *Geo. V. Chamberlain, Flint, Acting President | 1927—Herbert E. Randall, Flint |
| 1893—*Eugene Boise, Grand Rapids | 1928—Louis J. Hirschman, Detroit |
| 1894—*Henry O. Walker, Detroit | 1929—J. D. Brook, Grandville |
| 1895—*Victor C. Vaughan, Ann Arbor | 1930—*Ray C. Stone, Battle Creek |
| 1896—*Hugh McColl, Lapeer | 1931—*Carl F. Moll, Flint |
| 1897—*Joseph B. Griswold, Grand Rapids | 1932—J. Milton Robb, Detroit |
| 1898—*Ernest L. Shurly, Detroit | 1933—George LeFevre, Muskegon |
| 1899—*A. W. Alvord, Battle Creek | 1934—R. R. Smith, Grand Rapids |
| | 1935—Grover C. Penberthy, Detroit |

*Deceased.

President's Page

OUR STEWARDSHIP

IN GIVING an account of our stewardship, we must refer to the immediate history of the Michigan State Medical Society and give full credit to the months and years of important planning and organization which preceded our short tenure of office. We assumed the presidency to find a finely developed program plus a good organization to effect it. It remained during the past twelve months merely to set the plans into action. So we have seen accomplished the basic science law, the relief and welfare amendments, three splendid tuberculosis laws, two syphilis control laws, changes in the afflicted-crippled child acts and adoption of fee schedules in connection therewith, a new occupational disease law, augmented postgraduate extension courses, and a model constitution and by-laws for county medical societies. In addition, we have been making plans for the future: to accomplish greater county society organization, and to create a Michigan health league.

In so short a time as one year, little can be done; but each tenure adds a few stones to the sum total which makes a strong house.

The help I have received from the officers and members of the Society is acknowledged with sincere, heartfelt thanks. The coöperation of physicians throughout the State has been a genuine satisfaction to your President. I leave office with mixed feelings of pleasure and regret—pleasure, to be relieved of such heavy responsibilities; regret, at parting with such frequent and pleasant associations which the past two years have given me.

I have made wonderfully good friends. I have received much instruction and real education. I have had a magnificent experience. My thanks to you, doctors, one and all. Persevere, and good luck to you in your further efforts for Medicine!



President of the Michigan
State Medical Society

The 1937 Annual Meeting

GRAND RAPIDS

GRAND RAPIDS, the mecca for Michigan Medicine the last week in September, has an interesting history with its rapid and distinctive industrial development. It is the second city in size in this state. The annual conventions of the Michigan State Medical Society have become so large that only two cities in the state have convention halls sufficient to accommodate the

neer, established a trading post there, purchasing the ground for ninety dollars. A second pioneer was Lucius Lyon, who, having surveyed the site for the government, had intended to buy it for himself. He was forced to purchase it, however, from Campau at a much higher price. It is said that this transaction resulted in an estrangement between the two pioneers, the effect of



HOTEL PANTLIND

meetings, as well as exhibits which have become an important feature of the annual meetings within recent years; and right here we might say that with the evolution of scientific medicine has developed the means by which the doctor practices his profession. In other words, there has been a great development by way of invention of diagnostic and treatment equipment as well as refinement in drugs and foods intended for the sick.

Grand Rapids, we repeat, has an interesting history. The name is descriptive of the rapids in the Grand River. A little over a hundred years ago, one hundred and eleven to be exact, Louis Campau, a French pio-

neer, established a trading post there, purchasing the ground for ninety dollars. The two pioneers disagreed as to the name of the locality. Campau insisted on the name "Grand Rapids," while Lyon wanted it called "Kent" after a chancellor of New York state. The name of Chancellor Kent, however, is perpetuated in the county. All this is a matter of history.

Located in the midst of a lumbering district, from the beginning prosperity was assured to the town. At one time, Grand Rapids was noted for its shipbuilding, in spite of its distance of thirty miles from Lake Michigan. Perhaps for more than anything else, Grand Rapids today is pre-

THE 1937 ANNUAL MEETING

eminently known throughout the nation as the Furniture City of America, just as Detroit is known throughout the world as the great automobile center. Within recent years there have grown up in Grand Rapids,

al stores and scores of small, smart shops. It seems scarcely necessary to comment on Grand Rapids as a convention city, since the fact is already known to the medical profession of the state which has met there



CASCADE HILLS COUNTRY CLUB

industries which contribute to the automobile industry in the way of supplies and bodies for automobiles. It is said that 516 manufacturing plants produce about 2,500 manufactured products, refrigerators, tires, carpet sweepers, and articles in brass.

The inhabitants of the city number 176,000. There are 2,560 retail establishments, 80 schools, 150 churches, 11 hotels and 27 theaters. Grand Rapids is a city with a personality. It is essentially a city of homes, ministered to spiritually and culturally by the number of churches and schools mentioned. The material wants of the inhabitants are supplied by four large department-

a number of times and has partaken of the hospitality of the city. The medical profession of Grand Rapids is progressive and equal in ability to that of any city on the continent.

Any description of Grand Rapids would be very incomplete were one to omit mention of the many beautiful parks in and about the city. But chiefly is the city provided with wonderful facilities for golf. There are no less than eleven splendid golf courses in and around Grand Rapids. In addition to the private country clubs such as Cascade Hills, Highlands, Kent, Blithfield, and Green Ridge, there are a number of municipal and other public links.

YOU ARE INVITED

Sunday Afternoon, September 26, 1937

Second Annual Golf Tournament of M.S.M.S.
Cascade Hills Country Club, Grand Rapids
1:00 p. m.
Golfers' Banquet.....7:00 p. m.
(Swimming Pool at Cascade Hills C. C.)

Monday, September 27, 1937

Swiss Room, Pantlind Hotel, Grand Rapids
Delegates' Breakfast (complimentary to Delegates and to Officers and Councilors of the M.S.M.S.)8:00 a. m.

House of Delegates

First Session9:00 a. m.
Second Session3:00 p. m.
Third Session8:00 p. m.

Wednesday, September 29, 1937

Civic Auditorium, Grand Rapids

Address: "The Medical Profession vs. Syphilis"
THOMAS PARRAN, M.D., U. S. Surgeon General, Washington, D. C.8:00 p. m.
President's Reception9:30 p. m.

Official Program—The 1937 Annual Meeting

OFFICIAL CALL

THE Michigan State Medical Society will convene in Annual Session in Grand Rapids on September 27, 28, 29, 30, 1937. The provisions of the Constitution and By-laws and the Official Program will govern the deliberations.

Henry E. Perry, M.D.
President, Newberry
P. R. Urmston, M.D.
Chairman of The Council, Bay City
Frank E. Reeder, M.D.
Speaker, Flint

Attest: L. Fernald Foster, M.D.
Secretary, Bay City

INVITATION

GRAND RAPIDS and the Kent County Medical Society extend a cordial invitation to the Michigan State Medical Society and its four thousand members to come to The Furniture City for the Seventy-second Annual Convention of the State Society. The Committee on Arrangements is sparing no effort to make the coming session memorable for its unusual educational value and its enjoyable entertainment.

OFFICERS, MICHIGAN STATE MEDICAL SOCIETY

President.....Henry E. Perry.....Newberry
President-Elect...Henry Cook.....Flint
Treasurer.....Wm. A. Hyland.....Grand Rapids
Secretary.....L. Fernald Foster.....Bay City
Editor.....James H. Dempster.....Detroit
Speaker.....Frank E. Reeder.....Flint
Vice Speaker....Philip A. Riley.....Jackson
Executive Offices, 2020 Olds Tower, Lansing, Mich.
Wm. J. Burns, Executive Secretary

SCHEDULE OF EVENTS

Time	Sunday Sept. 26, 1937	Monday Sept. 27, 1937	Tuesday Sept. 28, 1937	Wednesday Sept. 29, 1937	Thursday Sept. 30, 1937
8:30 A.M.		8:00 A.M. Delegates Breakfast	Exhibits Open Registration	Exhibits Open Registration	Exhibits Open Registration
9:30 to 10:30		9:00 A.M. First	Seven	3rd General Assembly	6th General Assembly
10:30 to 11:00		Session House of	Section	Intermission to View Exhibits	Intermission to View Exhibits
11:00 to 12:30		Delegates	Meetings	3rd General Assembly	6th General Assembly
12:30 to 1:30		Luncheon Committee Work	Luncheon View Exhibits	Luncheon View Exhibits	Luncheon View Exhibits
1:30 to 3:00	Golf	Committee Work	1st General Assembly	4th General Assembly	7th General Assembly
3:00 to 3:30	Tournament	3:00 P.M. Second	Intermission to View Exhibits	Intermission to View Exhibits	Intermission to View Exhibits
3:30 to 4:30	Cascade Hills	Session House	1st General Assembly	4th General Assembly	7th General Assembly
4:30 to 6:00	Country Club	of Delegates	View Exhibits *	View Exhibits*	End of Convention
6:00 to 8:00	Golfers' Banquet	Dinner Committee Work	Secretaries' Conference	Fraternity and Alumni Banquets	
8:00 to 10:00	Presentation of Prizes	8:00 P.M. Third Session, House of Delegates	2nd General Assembly	5th General Assembly and President's Reception	

*Exhibits close Tuesday and Wednesday at 6:00 P.M.; Thursday at 3:30 P.M.
Registration Desk—Exhibit Floor Civic Auditorium.
Hours of Registration: Daily, 8:30 A.M. to 6:00 P.M.

PROGRAM SYNOPSIS

SUNDAY, SEPTEMBER 26

- 1:00 P. M. Second Annual Golf Tournament
Cascade Hills Country Club, Grand Rapids
7:00 P. M. Golfers' Banquet; Presentation of Prizes
(Swimming Pool available at Cascade Hills.)
6:00 P. M. Meeting of The Council of the Michigan State Medical Society
Cascade Hills Country Club, Grand Rapids

MONDAY, SEPTEMBER 27

Swiss Room, Pantlind Hotel, Grand Rapids

- 8:00 A. M. Delegates' Breakfast
9:00 A. M. First Session, House of Delegates
3:00 P. M. Second Session, House of Delegates
8:00 P. M. Third Session, House of Delegates

TUESDAY, SEPTEMBER 28

Civic Auditorium, Grand Rapids

- 8:30 A. M. Registration; Exhibits Open
9:00 A. M. Scientific Sections:

General Medicine
Black and Silver Ballroom
Surgery
Red Room
Obstetrics and Gynecology
Room "G"
Ophthalmology and Otolaryngology
Room "F"
Pediatrics
Directors Room
Dermatology and Syphilology
Room "B"
Radiology
Room "C"

OFFICIAL PROGRAM



JOHN T. ERDMANN
New York, N. Y.



THOMAS PARRAN, JR.
Washington, D. C.



J. H. J. UPHAM
Columbus, O.



OTTO HENRY SCHWARZ
St. Louis, Mo.

Guest
Speakers



W. WAYNE BABCOCK
Philadelphia, Pa.



A. GRAEME MITCHELL
Cincinnati, O.

Grand Rapids
Session
1937



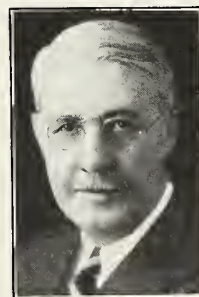
GEORGE A. HARROP
Brooklyn, N. Y.



MAXWELL J. LICK
Erie, Pa.



GEORGE P. REYNOLDS
Boston, Mass.



JOHN T. MURPHY
Toledo, O.

OFFICIAL PROGRAM

- 1:00 P. M.—First General Assembly**
Black and Silver Ballroom
- 5:30 P. M. Secretaries' Conference**
Swiss Room, Pantlind Hotel
- 8:00 P. M.—Second General Assembly**
Biddle Oration; Maxwell Lick Lecture
Black and Silver Ballroom

WEDNESDAY, SEPTEMBER 29

Civic Auditorium, Grand Rapids

- 9:30 A. M.—Third General Assembly**
Black and Silver Ballroom
- 1:30 P. M.—Fourth General Assembly**
Black and Silver Ballroom
- 8:00 P. M.—Fifth General Assembly (PUBLIC MEETING)**
President's Night; Parran Lecture;
President's Reception.
Main Auditorium

THURSDAY, SEPTEMBER 30

Civic Auditorium, Grand Rapids

- 9:30 A. M.—Sixth General Assembly**
Black and Silver Ballroom
- 12:15 P. M.—Organizational Luncheon of 1937-38 Committee Chairmen**
- 1:30 P. M.—Seventh General Assembly**
Black and Silver Ballroom

CONVENTION INFORMATION

Here Are the Answers to Most of Your Questions

DIRECTORY

Meeting Headquarters...Civic Auditorium
Registration, Exhibit Floor.....
Civic Auditorium
Hotel Headquarters.....Pantlind Hotel
Technical Exhibits.....Civic Auditorium
General Assemblies.....
Black and Silver Ballroom,
Civic Auditorium
President's Night (Public Meeting)...
Main Auditorium, Civic Auditorium
Woman's Auxiliary, Headquarters and
Registration.....Pantlind Hotel
Publicity, Press Room.....
Room "D," Civic Auditorium
Secretary's Office.....Pantlind Hotel

* * *

Register—Exhibit Floor, Civic Auditorium, Grand Rapids—as soon as you arrive.

Admission will be by badge only to all Scientific assemblies and Section meetings. Bring your A.M.A. or County Society registration card to expedite registration.

No registration fee to members of the Michigan State Medical Society.

* * *

Guests—Members of the American Medical Association from any state, or from a province of Canada, may register as guests without charge. A welcome is extended to physicians in good standing in their respective County or State society.

The Registration figure for 1936, at the De-

troit Convention, was 1,687 (not including the ladies).

* * *

Physicians, not members, if listed in the Directory of the A.M.A. may register upon payment of \$5.00. (This amount will be credited to them as dues in the Michigan State Medical Society for the balance of 1937 only, provided they subsequently make application to their County Medical Society and are accepted therein.)

* * *

The Seventy-one Technical Exhibits deserve your attention. The labyrinth of exhibits is so arranged that physicians may pass each display going to and returning from meetings. Progress in technical equipment, in pharmaceutical manufacture, new books, appurtenances, etc., etc.—all displayed for your interest.

* * *

Technical Exhibits open Tuesday, September 28, at 8:30 A. M., and on Wednesday and Thursday at the same hour. Exhibits close Tuesday and Wednesday at 6:00 P. M.; Thursday at 3:30 P. M.

Please register at each booth.

Intermissions to view the exhibits have been arranged during the morning and afternoon General Assemblies.

* * *

COUNTY SECRETARIES' CONFERENCE
Swiss Room Pantlind Hotel
Tuesday, September 28, 1937
5:30 to 8:00 P. M.
REFRESHMENTS — DINNER — THREE
SHORT INFORMATIVE CHATS
ALL MEMBERS OF THE STATE SOCIETY WILL BE WELCOME AT THE
CONFERENCE

* * *

Parking—Do not park on the street. Use parking lots available to the Civic Auditorium, or inside parking facilities through hotel service. Police officer at Registration Desk will aid with parking.

* * *

Telephone Service—Local and long-distance telephone will be available. Inquire at Registration Desk.

* * *

In Case of Emergency, doctors will be paged from the General Assemblies and from the Section meetings by announcement on the screen.

* * *

Fraternity and Alumni luncheons, banquets, dinners, Wednesday, September 29, 1937.

Watch the bulletin board, or inquire at Registration Desk for times and places of these special affairs.

* * *

PRESIDENT'S RECEPTION—PUBLIC MEETING

All members of the Michigan State Medical Society and guests are invited and urged to attend the President's Reception, Wednesday evening, September 29, 1937, after the Parran Lecture (informal).

The assembly of Wednesday evening will be a **Public Meeting**.



CLAUDE S. BECK
Cleveland, O.



OLIVER S. ORMSBY
Chicago, Ill.



FOSTER KENNEDY
New York, N. Y.



PAUL HOLINGER
Chicago, Ill.

Guest Speakers



D. C. BALFOUR
Rochester, Minn.

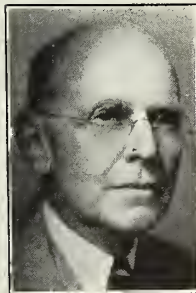


WM. L. BENEDICT
Rochester, Minn.

Grand Rapids Session 1937



ALVAN L. BARACH
New York, N. Y.



ELLIOTT P. JOSLIN
Boston, Mass.



E. E. IRONS
Chicago, Ill.



WM. P. HEALY
New York, N. Y.

OFFICIAL PROGRAM

All Section Meetings will be held Tuesday morning, September 28, in the Civic Auditorium. Some will elect their officers at luncheons following the Scientific meetings.

Seven General Assemblies, all in the Civic Auditorium. (See detailed program, page 675.)

* * *

Michigan Branch, Medical Women's National Association, Inc., is holding its session in conjunction with those of the Michigan State Medical Society. Several interesting luncheon and dinner meetings have been arranged. The program will be posted on the Bulletin Board (next to the Registration Desk). The president and secretary of the Michigan Branch of the Association are Dr. Kathryn Bryan of Manistee, and Dr. Mary Margaret Fraser of Detroit, respectively.

* * *

Golf—Second Annual Tournament will be held Sunday, September 26, Cascade Hills Country Club. Five flights, for experts, dubs, beginners, with prizes in all flights, even for members fifty years and over, and for kickers. Register at Cascade Hills at 1:00 P. M. Dinner at 7:00 P. M. Swimming pool at the Club.

Golfing physicians may play the Blyfield Country Club or the Kent Country Club courses, through arrangements made by the Local Committee. Merely present your Michigan State or County Medical Society certificate, and pay the regular green fee.

Location of Cascade Hills Country Club: On U. S. 16, four and one-half miles east of Grand Rapids.

* * *

Hotel Accommodations—A member of the Local Committee on Arrangements will be at the Registration Desk to assist in procuring hotel accommodations for anyone desiring same.

* * *

The Program—all under one roof—will be presented in the Civic Auditorium. A tunnel leads from the headquarters hotel, the Pantlind, to the Civic Auditorium, where all meetings and the Technical Exhibit will be held.

* * *

The 1937 Convention is the Seventy-second Annual Session of the Michigan State Medical Society, and marks the 117th year of Organized Medicine in the Territory and State of Michigan.

* * *

GRAND RAPIDS HOTELS

Hotel	Distance from		No. Rooms	Rates	
	Civic Auditorium	Connected by underground passage with Auditorium		Single	Double
Pantlind			750	\$2.50-\$6.00	\$5.00-\$10.00
Morton	3 blocks		400	2.00- 6.00	3.50- 8.00
Rowe	2 blocks		300	2.00- 5.00	3.50- 7.50
New Mertens	5 blocks		150	1.50- 2.50	2.50- 4.00
Hermitage	2 blocks		200	1.00- 1.75	1.50- 2.25
Browning	8 blocks		150	1.50- 2.50	2.50- 3.50
Cody	4 blocks		150	1.25- 2.50	2.00- 3.50

* * *

Purposes of the Michigan State Medical Society—The purposes of this society are to promote the science and art of medicine, the protection of public health, and the betterment of the medical profession; and to unite with similar organizations in other states and territories of the United States to form the American Medical Association. (Article Two of the Constitution.)

* * *

Grand Rapids Committee on Arrangements: Drs. M. S. Ballard, Chairman, Leon DeVel,

Wm. R. Torgerson, A. V. Wenger, Paul W. Bloxson.

* * *

Press Committee for 1937 Meeting—Drs. J. Duane Miller, Grand Rapids, Chairman; M. S. Chambers, Flint; G. Warren Hyde, Detroit; Roy H. Holmes, Muskegon; E. R. Witwer, Detroit.

HOUSE OF DELEGATES, 1937

Swiss Room, Pantlind Hotel, Grand Rapids

ORDER OF BUSINESS*

Monday, September 27, 1937

8:00 a. m. sharp—DELEGATES' BREAKFAST

9:00 a. m. sharp—FIRST SESSION

1. Call to Order by the Speaker
2. Report of Committee on Credentials
3. Roll Call
4. Appointment of Reference Committees:
 - On Officers' Reports
 - On Reports of The Council
 - On Reports of Standing Committees
 - On Reports of Special Committees
 - On Amendments to Constitution and By-laws
 - On Resolutions
5. Speaker's Address—FRANK E. REEDER, Flint
6. President's Address—HENRY E. PERRY, Newberry
7. President-elect's Address—HENRY COOK, Flint
8. Annual Report of The Council
9. Report of Delegates to American Medical Association.
10. Reports of Standing Committees:
 - (a) Legislative Committee (and sub-committees)
 - (b) Representatives to Joint Committee on Health Education
 - (c) Committee on Medical Economics
 - (d) Cancer Committee
 - (e) Preventive Medicine Committee (and sub-committee)
 - (f) Committee on Post-graduate Medical Education
 - (g) Public Relations Committee
 - (h) Ethics Committee

Recess

Monday, September 27, 1937

3:00 p. m. sharp—SECOND SESSION

1. Supplementary Report of Committee on Credentials
2. Roll Call
3. Reports of Special Committees:
 - (a) Maternal Health Committee
 - (b) Contact Committee to Governmental Agencies
 - (c) Mental Hygiene Committee
 - (d) Radio Committee
 - (e) Advisory Committee, Woman's Auxiliary
 - (f) Liaison Committee with Hospital Association
 - (g) Liaison Committee with State Bar
 - (h) Liaison Committee with Dentists, Nurses and Pharmacists
4. Unfinished Business:
 - (a) Four Amendments to Constitution

*See the Constitution, Article IV, and the By-laws, Chapter 3, on the "House of Delegates."

OFFICIAL PROGRAM

5. Resolutions*
6. New Business*
7. Reports of Reference Committees:
 - (a) On Officers' Reports
 - (b) On Reports of The Council
 - (c) On Reports of Standing Committees
 - (d) On Reports of Special Committees
 - (e) On Amendments to Constitution and By-laws
 - (f) On Resolutions

Recess

Monday, September 27, 1937

8:00 p. m. sharp—THIRD SESSION

1. Supplementary Report of Committee on Credentials
2. Roll Call
3. Supplementary Report from The Council
4. Supplementary Report from Reference Committees
5. Elections:
 - (a) Councilors:

- Seventh District, to succeed T. F. HEAVEN-RICH, Port Huron
Eighth District, to succeed W. E. BARTSTOW, St. Louis
Ninth District, to succeed HARLAN MACMULLEN, Manistee
Tenth District, to succeed PAUL R. URMSTON, Bay City
- (b) Delegates to A.M.A. to succeed:
LOUIS J. HIRSCHMAN, Detroit
Alternates to succeed:
G. J. CURRY, Flint
R. H. PINO, Detroit
 - (c) Place of Annual Meeting
 - (d) President-elect
 - (e) Secretary (if amendment to Constitution is adopted)
 - (f) Speaker of House of Delegates
 - (g) Vice Speaker of the House of Delegates
6. Adjournment

*All resolutions, special reports, and new business shall be presented in quadruplicate.

Woman's Auxiliary to the Michigan State Medical Society



(Photo by Coulter Studio, Grand Rapids, Mich.)

MRS. H. S. COLLISI

General Chairman of Committee of the Woman's Auxiliary for the 72nd Annual Convention of the Michigan State Medical Society, Grand Rapids

Officers 1936-37

Mrs. A. V. Wenger, Grand Rapids.....President
Mrs. G. C. Hicks, Jackson.....President-Elect
Mrs. Claire L. Straith, Detroit.....Vice President
Mrs. Carl F. Snapp, Grand Rapids.....Secretary-Treasurer
Mrs. A. M. Giddings, Battle Creek..Past President
Mrs. Guy L. Kiefer, East Lansing.....Honorary President

PROGRAM

**Pantlind Hotel, Grand Rapids, Michigan
September 28-30, 1937**

TUESDAY, SEPTEMBER 28

Registration at Pantlind Hotel

- 12:30 P. M. Luncheon Meeting**
Woman's City Club
2:00 P. M. Pre-convention Board Meeting
Woman's City Club
6:30 P. M. Dinner and Bridge
Woman's City Club

WEDNESDAY, SEPTEMBER 29

- 10:00 A. M. Annual Meeting**
Pantlind Hotel
Presiding—Mrs. A. V. Wenger
Minutes—Mrs. Carl F. Snapp
Reports of County Presidents
Nominating Committee
Election of Officers
Installation of Officers
Courtesy Resolutions
Adjournment

1:30 P. M. Luncheon

Kent Country Club
Speaker: Henry A. Luce, M.D.,
"How to Get Along With Your
Nervous Relatives."
Honor Guests:
Henry E. Perry, M.D., President
M.S.M.S.
Henry Cook, M.D., President-Elect,
M.S.M.S.
L. Fernald Foster, M.D., Secretary,
M.S.M.S.
Florence Ames, M.D., Chairman, Ad-
visory Committee.
A. B. Smith, M.D., President, K.C.M.S.

- 3:00 P. M. Post-convention Board Meeting**
Kent Country Club
Presiding—Mrs. G. C. Hicks

- 4:00 P. M. Tour of Gardens and Teas**

THURSDAY, SEPTEMBER 30

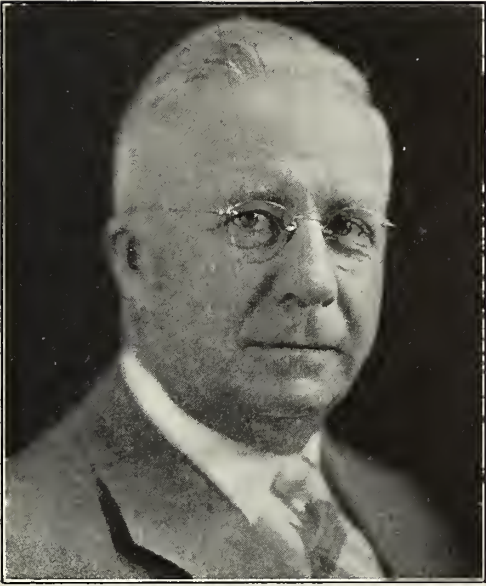
- 10:00 A. M. Tour of Furniture Show Rooms**

Outline of Sections

Tuesday Morning, September 28, 1937 (9:00 A. M. to 12:30 P. M.)

General Medicine Black and Silver Ballroom Civic Auditorium	Surgery Red Room Civic Auditorium	Gynecology & Obstetrics Room "G" Civic Auditorium	Ophthalmology-Otology Room "F" Civic Auditorium	Pediatrics Directors Room Civic Auditorium	Dermatology & Syphilology Room "B" Civic Auditorium
Geo. L. Waldbott, M.D. Detroit	Wm. J. Butler, M.D. Grand Rapids	J. D. Miller, M.D. Grand Rapids	W. L. Benedict, M.D. Rochester, Minn.	C. R. Dengler, M.D. Jackson	G. W. Hyde, M.D. Detroit
F. P. Currier, M.D. Grand Rapids	D. C. Balfour, M. D. Rochester, Minn.	Carl Erye, M.D. Ann Arbor	J. H. Maxwell, M.D. Ann Arbor	J. A. Johnston, M.D. Detroit	Howard Parkhurst, M.D. Toledo, Ohio
A. C. Curtis, M.D. Ann Arbor	C. D. Brooks, M.D. Detroit	A. M. Campbell, M.D. Grand Rapids	Luncheon	D. J. Levy, M.D. Detroit	G. VanRhee, M.D. Detroit
L. Stern, M.D. Detroit	Carl Badgley, M.D. Ann Arbor	Otto Schwarz, M.D. St. Louis, Missouri		A. Graeme Mitchell, M.D. Cincinnati, O.	Frank Menagh, M.D. Detroit
A. L. Barach, M.D. New York City	W. W. Babcock, M.D. Philadelphia	Business Session			A. R. Woodburne, M.D. Grand Rapids
		Luncheon and Round Table			L. W. Shaffer, M.D. Detroit
					Thomas Miller, M.D. Detroit
					Hermann Pinkus, M.D. Eloise
					H. L. Keim, M.D. Detroit
					E. A. Hand, M.D. Saginaw
					M. G. Butler, M.D. Saginaw
					K. Moore M.D. Flint
					Election of Officers
SECTION MEETINGS on Tuesday Morning only. Please be prompt.					
REGISTER—EXHIBIT FLOOR—CIVIC AUDITORIUM.					
Admission to All Sessions by Badge Only.					
FOR DETAILED PROGRAM OF THE SECTIONS, PLEASE TURN TO PAGE 674.					
			Radiology Room "C" Civic Auditorium		
			Business Meeting Only		

OFFICIAL PROGRAM



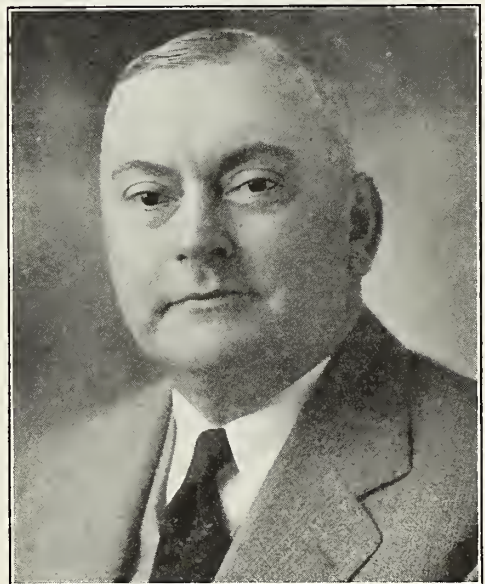
HENRY E. PERRY, Newberry
President



PAUL R. URMSTON, Bay City
Chairman of the Council



HENRY COOK, Flint
President-Elect



FRANK E. REEDER, Flint
Speaker of the House of Delegates

PROGRAM**TUESDAY MORNING****September 28, 1937****SECTION ON GENERAL MEDICINE****Civic Auditorium, Black and Silver Ballroom
(First Floor, West End of Main Lobby)**Chairman, MYRTON S. CHAMBERS, M.D., Flint
Secretary, W. L. BETTISON, M.D., Grand Rapids**A. M.****9:00 Sensitization Tests—Then What?**

GEORGE L. WALDBOTT, M.D., Detroit

**9:30 Neurological Aspects of Reading and
Writing Disabilities in School Children**

F. P. CURRIER, M.D., Grand Rapids

**10:00 The Comparative Value of Several Liver
Function Tests Done on the Same Pa-
tients**

A. C. CURTIS, M.D., Ann Arbor

**10:30 The Bone Marrow from a Clinical Diag-
nostic Viewpoint**

L. STERN, M.D., Detroit

11:00 Election of Officers**11:15 Physiologic Treatment of Congestive as
Contrasted to Peripheral Circulatory
Failure**A. L. BARACH, M.D., New York City
*Assistant Professor of Clinical Medicine at the
College of Physicians and Surgeons and Assist-
ant Attending Physician at the Presbyterian Hos-
pital. Member of the American Society for Clinical
Investigation, the Society for Experimental
Biology and Medicine, the American College of
Physicians, and the New York Academy of
Medicine.*

The primary characteristic of congestive heart failure is engorgement of the vascular bed, in left ventricular failure the pulmonary capillaries are engorged, and in right ventricular failure the tributaries leading to the inferior and superior venæ cavæ. There is, therefore, an increase in the venous pressure of the veins that lead to the failing chamber, which increases the work performed by this chamber in the succeeding systole of the heart. In peripheral circulatory failure, the characteristic disturbance is a deficient venous return to the right heart, so that both ventricles deal with a decreased supply of blood. The treatment is directed toward decreasing the volume of blood in the circulation in congestive heart failure, and increasing the volume of blood in the circulation in peripheral heart failure. A differentiation between these two forms of circulatory failure is, therefore, of considerable importance. The special value of the inhalation of relatively high concentrations of oxygen is discussed in both these conditions as well as the more recent employment of positive pressure in the treatment of left ventricular failure and pulmonary edema.

P. M.**12:15 Luncheon****SECTION ON SURGERY****Civic Auditorium, Red Room (Second Floor,
West End of Main Lobby)**Chairman, CHARLES R. KENNEDY, M.D., Detroit
Secretary, WM. R. TORGERSO, M.D., Grand Rapids**A. M.****9:30 The Management of Diseases of the
Bladder in Women**

WM. J. BUTLER, M.D., Grand Rapids

**10:00 The Evaluation of the Surgical Treat-
ment of Peptic Ulcer**

DONALD C. BALFOUR, M.D., Rochester, Minn.

10:30 Modern Surgery of the Biliary Tract

C. D. BROOKS, M.D., Detroit

**11:00 Non-union: A Clinical Study of Non-
union of Fractures of the Shafts of the
Long Bones.**

CARL E. BADGLEY, M.D., Ann Arbor

**11:30 Resecting the Cancerous Colon Without
Permanent Colonostomy**

W. WAYNE BABCOCK, M.D., Philadelphia, Penna.

**SECTION ON GYNECOLOGY AND
OBSTETRICS****Civic Auditorium, Room "G" (Second Floor,
West End of Main Lobby)**Chairman, J. DUANE MILLER, M.D., Grand Rapids
Secretary, NORMAN R. KRETZSCHMAR, M.D., Ann Arbor**A. M.****9:30 Chairman's Address**

J. DUANE MILLER, M.D., Grand Rapids

10:00 Pregnancy in Bi-cornuate Uterus

CARL FRYE, M.D., Ann Arbor

**10:30 Comments on the Obstetric Survey in
Michigan**

ALEXANDER M. CAMPBELL, M.D., Grand Rapids

**11:00 Prevention and Treatment of Late Tox-
emias of Pregnancy**

OTTO SCHWARZ, M.D., St. Louis, Mo.

12:00 Business Session**P. M.****12:30 Luncheon. Round Table Discussion on
Obstetrics**

Conducted by OTTO SCHWARZ, M.D.

**SECTION ON OPHTHALMOLOGY AND
OTOLARYNGOLOGY****Civic Auditorium, Room "F" (First Floor,
West End of Main Lobby)**Chairman, FERRIS N. SMITH, M.D., Grand Rapids
Secretary, DEWEY R. HEETDERKS, M.D., Grand Rapids**A. M.****9:30 to 10:45 Ophthalmological Round Table**

Conducted by WM. L. BENEDICT, M.D., Rochester, Minn.

**11:00 to 12:15 P. M. Round Table Discussion
on Pterosis—Signs and Symptoms**

Conducted by JAMES H. MAXWELL, M.D., Ann Arbor

P. M.**1:00 Luncheon, Pantlind Hotel**

TUESDAY MORNING
September 28, 1937

SECTION ON PEDIATRICS
Civic Auditorium, Directors Room
(Second Floor, East End of Main Lobby)

Chairman, CHARLES R. DENGLE, M.D., Jackson
Secretary, WARD L. CHADWICK, M.D., Grand Rapids

- A. M.**
9:30 **Chairman's Address**
CHARLES R. DENGLE, M.D., Jackson
10:00 **Recurrent Vomiting**
J. A. JOHNSTON, M.D., Detroit
10:30 **Diagnostic Considerations in Rheumatic Infections in Childhood**
DAVID J. LEVY, M.D., Detroit
11:00 **The Thymus Gland**
A. GRAEME MITCHELL, M.D., Cincinnati, Ohio

SECTION ON DERMATOLOGY AND SYPHILOLOGY

Civic Auditorium, Room "B" (First Floor,
East Hallway Off Main Auditorium)

Chairman, G. WARREN HYDE, M.D., Detroit
Secretary, RUTH HERRICK, M.D., Grand Rapids

- A. M.**
9:30 **Chairman's Address**
G. WARREN HYDE, M.D., Detroit
9:45 **Treatment of Coccogenous Sycosis**
HOWARD PARKHURST, M.D., Toledo, Ohio
10:05 **Discussion**
GEORGE VAN RHEE, M.D., Detroit
10:10 **Glucose Tolerance and Phosphorus Curves in Patients with Dermatoses**
FRANK MENAGH, M.D., Detroit
10:30 **Discussion**
A. R. WOODBURN, M.D., Grand Rapids
10:35 **Some Problems of the Control Program for Syphilis**
LOREN W. SHAFFER, M.D., Detroit
10:55 **Discussion**
THOMAS H. MILLER, M.D., Detroit
11:00 **Some Uncommon Skin Tumors**
HERMANN PINKUS, M.D., Eloise
11:20 **Discussion**
H. L. KEIM, M.D., Detroit
11:25 **Premalignant Lesions of the Skin and Mucous Membranes**
E. A. HAND, M.D., Saginaw
11:50 **Discussion**
MILTON G. BUTLER, M.D., Saginaw
11:55 **Report of a Case of Bromoderma in an Infant**
KENNETH MOORE, M.D., Detroit

- P. M.**
12:10 **General Discussion of Papers**
12:30 **Election of Officers**

SECTION ON RADIOLOGY

Civic Auditorium, Room "C" (First Floor,
East Hallway Off Main Auditorium)

Chairman, S. W. DONALDSON, M.D., Ann Arbor
Secretary, E. R. WITWER, M.D., Detroit

The Section on Radiology will have only a Business Meeting

TUESDAY AFTERNOON
September 28, 1937

First General Assembly

Black and Silver Ballroom, Civic Auditorium

President HENRY E. PERRY, M.D., Newberry, Presiding
L. FERNALD FOSTER, M.D., Bay City, and N. R. KRETZSCHMAR, M.D., Ann Arbor, Secretaries

P. M.

- 1:00** **Greetings from the American Medical Association**
"The Trends of Modern Practice"
J. H. J. UPHAM, M.D., Columbus, Ohio
President, American Medical Association
Greetings from the Michigan State Nurses Association
MARIAN DURELL, R.N., Ann Arbor, President
Greetings from the Michigan State Dental Society
U. G. RICKERT, D.D.S., Ann Arbor, President
Greetings from the Michigan State Pharmaceutical Association
OTIS COOK, Lansing, Secretary

- 1:30** **The Diagnosis and Treatment of Gastro-Intestinal Hemorrhage**
DONALD C. BALFOUR, M.B., M.D., F.A.C.S., LL.D., F.R.C.S. (Aust.), Rochester, Minn.
Born August 22, 1882, in Toronto, Canada. Professor of Surgery and Director of the Mayo Foundation, and Head of a section in the Division of Surgery in the Mayo Clinic.

Presentation will include a discussion of the incidence of lesions of the gastro-intestinal tract which are responsible for gastro-intestinal hemorrhage. It will deal with the factors which may cause hemorrhage, the differential diagnosis of various lesions, the significance of the different types of hemorrhage, and the indications for management of the hemorrhage itself. There will be a review of the management of the lesions which are responsible for the hemorrhage and the results of such management.

- 2:00** **Pulmonary Complications in Adult Medical and Surgical Patients**
ERNEST E. IRONS, M.D., Chicago, Ill.
Chairman of the Department of Medicine at Rush Medical College, and Attending Physician at Presbyterian Hospital.

This study is an attempt to analyze the pulmonary complications occurring in hospital patients which have heretofore usually been diagnosed as hypostatic, or bronchopneumonia. Included in this group are occasional cases of true lobar pneumonia, some cases of bronchopneumonia, caused by the organisms usually found in the respiratory tract, septic and hemorrhagic infarcts, compression atelectasis and bronchitis, and an unsuspectedly large number of lesions resulting from the aspiration of stomach contents, or, in recent years less frequently, food.

The physical findings in all these conditions have much in common, but a consideration of circumstances under which they occur, such as the presence of peripheral thrombophlebitis, both so-called simple, and obviously septic, postoperative dilatation of gastro-intestinal tract, chronic cardiac disease, and the group in which coma or marked depression of reflexes is present, will aid in a more adequate differential diagnosis.

Recognition of possible complications which may arise from aspiration of stomach contents, will call for the institution of preventive measures such as continuous gastric drainage.

- 2:30** **The Use of Roentgen Ray in the Treatment of Fibroid Tumors and Bleeding of the Menopause**

JOHN T. MURPHY, M.D., Toledo, Ohio
Born 1885; graduated Toledo University, 1906. Secretary, Section on Radiology, A.M.A.; Past-president, American Roentgen Ray Society; Past-president, American College of Radiology; Fellow, Radiological Society of North America; Fellow, American College of Physicians; Past-president of Toledo Academy of Medicine.

The paper will discuss the subject from the standpoint of indications and contra-indications as seen in review of the literature, with a discussion on the results obtained. There will be no lantern slides.

OFFICIAL PROGRAM

OUTLINE OF SEVEN GENERAL ASSEMBLIES*

Hour	Tuesday September 28, 1937	Wednesday September 29, 1937	Thursday September 30, 1937
A.M. 8:30	Exhibits Open Registration	Exhibits Open Registration	Exhibits Open Registration
9:30 to 10:00	SEVEN	FERRIS SMITH, M.D. Grand Rapids, Mich.	HAROLD HENDERSON, M.D. Detroit, Mich.
10:00 to 10:30	SECTION	OLIVER S. ORMSBY, M.D. Chicago, Illinois	PAUL HOLINGER, M.D. Chicago, Illinois
10:30 to 11:00	MEETINGS	Intermission to VIEW EXHIBITS	Intermission to VIEW EXHIBITS
11:00 to 11:30	SEE	A. GRAEME MITCHELL, M.D. Cincinnati, Ohio	F. BRUCE FRALICK, M.D. Ann Arbor, Mich.
11:30 to 12:00	PROGRAM ON	A. GRAEME MITCHELL, M.D. Cincinnati, Ohio	GEO. A. HARROP, M.D. Brooklyn, N. Y.
P.M. 12:30 to 1:00	PAGE 674	CHAS. G. JOHNSTON, M.D. Detroit, Mich.	HENRY K. RANSOM, M.D. Ann Arbor, Mich.
12:30 to 1:00	Luncheon VIEW EXHIBITS	Luncheon VIEW EXHIBITS	Luncheon VIEW EXHIBITS
1:00 to 1:30	JOHN H. J. UPHAM, M.D. Columbus, Ohio	Luncheon VIEW EXHIBITS	Luncheon VIEW EXHIBITS
1:30 to 2:00	DONALD C. BALFOUR, M.D. Rochester, Minnesota	GEO. A. KAMPERMAN, M.D. Detroit, Mich.	GEO. P. REYNOLDS, M.D. Boston, Mass.
2:00 to 2:30	E. E. IRONS, M. D. Chicago, Illinois	L. H. NEWBURGH, M.D. Ann Arbor, Mich.	FOSTER KENNEDY, M.D. New York, N. Y.
2:30 to 3:00	JOHN T. MURPHY, M.D. Toledo, Ohio	WM. L. BENEDICT, M.D. Rochester, Minn.	F. D. JOHNSTON, M.D. Ann Arbor, Mich.
3:00 to 3:30	Intermission to VIEW EXHIBITS	Intermission to VIEW EXHIBITS	Intermission to VIEW EXHIBITS
3:30 to 4:00	F. C. KIDNER, M.D. Detroit, Mich.	WM. P. HEALY, M.D. New York, N. Y.	JOHN ERDMANN, M.D. New York, N. Y.
4:00 to 4:30	OTTO SCHWARZ, M.D. St. Louis, Mo.	CLAUDE BECK, M.D. Cleveland, Ohio	W. WAYNE BABCOCK, M.D. Philadelphia, Pa.
4:30 to 6:00	VIEW EXHIBITS	VIEW EXHIBITS	END OF CONVENTION
6:00 to 8:00	SECRETARIES' CONFERENCE	Dinner	
8:00 to 9:00	MAXWELL J. LICK, M.D. Erie, Pa.	THOMAS PARRAN, JR., M.D. Washington, D. C.	
9:00 to 10:00	ELLIOTT P. JOSLIN, M.D. Boston, Mass.	PRESIDENT'S RECEPTION	

*ADMISSION TO ALL SESSIONS BY BADGE ONLY!
For detailed program of the General Assemblies, please turn
to page 675.

All General Assemblies will be held in the Black and Silver
Ballroom of the Civic Auditorium (except the public
meeting of Wednesday evening, which will be held in
the Main Auditorium, Civic Auditorium).

TUESDAY AFTERNOON September 28, 1937

3:00 INTERMISSION TO VIEW THE EXHIBITS

3:30 Internal Fixation of Fractures of the Neck of the Femur

FREDERICK C. KIDNER, M.D., F.A.C.S., Detroit,
Mich.

Born 1879. Graduated from Harvard College
1900; Harvard Medical School 1904. Orthopedics
with Dr. Joel E. Goldthwaite, 1905-06. General
practice and general surgery in Boston until 1910.
Specialized on Orthopedics in Detroit since 1911.
Director Orthopedic Service Children's Hospital
of Michigan; Surgeon in charge Orthopedic De-
partment, Harper Hospital. President of American
Orthopedic Association, member of American Col-
lege of Surgeons, American Academy of Ortho-
pedic Surgeons, and International Orthopedic So-
ciety.

Summary of the anatomy and physiology of
fractures of the intertrochanteric region and neck
of the femur.

Discussion of reasons for prompt union in the
intertrochanteric region, and for frequent failure
of union in the neck of the femur.

Historical discussion of the various methods of
reduction and retention of fractures of the neck
of the femur.

First: Closed methods such as the Whitman.

Second: Open methods, spiking, bone grafts,
nails and pins.

Open nailing as against blind nailing.

Choice of methods with special regard to the
age and general physical condition of the patient.

Discussion of results to be expected with the
various methods.

Lantern slides.

4:00 Cesarean Section—Its Indications and Technic

OTTO H. SCHWARZ, M.D., St. Louis, Missouri
Professor, Obstetrics and Gynecology, Washing-
ton University School of Medicine, St. Louis,
Missouri.

Indications — Incidence — Its Frequent Abuse
—Mortality from Cesarean Section—Types of
Cesarean Operations—Indications for Each—Re-
sults of Cesarean Sections in a Ten-Year Series
at the St. Louis Maternity Hospital.

4:30 End of First General Assembly VIEW THE EXHIBITS

TUESDAY EVENING
September 28, 1937

Second General Assembly

8:00 P. M.

Black and Silver Ballroom, Civic Auditorium

ANDREW P. BIDDLE, M.D., Detroit, Presiding

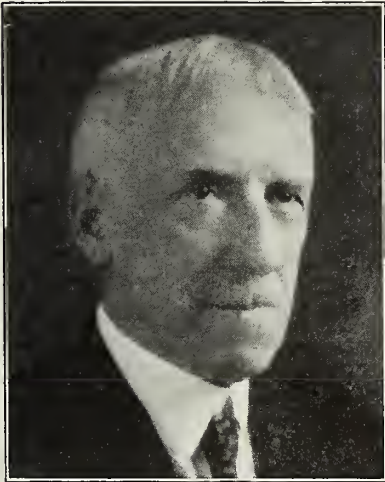
L. FERNALD FOSTER, M.D., Bay City, and W. L. BETTISON, M.D., Grand Rapids, Secretaries

1. A Charge to Keep

MAXWELL J. LICK, M.D., Erie, Pennsylvania

Graduated from the University of Pennsylvania, School of Medicine, 1912; Resident physician to the Philadelphia Lying-in-Charity Hospital, Philadelphia; Resident physician to the University of Pennsylvania Hospital for two years; Postgraduate work in various leading clinics in the United States and foreign clinics; Fellow American College of Surgeons; Past President Erie County Medical Society; member of the Phi Delta Theta and Phi Alpha Sigma fraternities; also Phi Beta Kappa and Alpha Omega Alpha, honorary fraternities. President, Medical Society of the State of Pennsylvania.

The interest and leadership of physicians in all medical matters is vital to the continuation of good medical practice. Medicine is an art and cannot be mechanized without detriment to the people. The political and economic aspects of our time have had their effects upon medicine, but we have principles and a heritage to maintain—a charge to keep!



ANDREW P. BIDDLE, M.D., Detroit, Mich.
Past-President of the Michigan State Medical Society, Patron of Postgraduate Medical Education

2. The Andrew P. Biddle Oration "The Diabetic Problem as Influenced by Protamine Insulin"

ELLIOTT P. JOSLIN, M.D., Boston, Massachusetts

Clinical Professor of Medicine, Harvard University Medical School, and Harvard Graduate Medical School, Boston

In the course of his remarks, Doctor Joslin also will discuss practical methods which he believes would be useful and efficacious in dealing with diabetes in Massachusetts and perhaps would be valuable also in Michigan.

Presentation of Biddle Oration Scroll to Doctor Joslin.

WEDNESDAY MORNING
September 29, 1937

Third General Assembly

Black and Silver Ballroom, Civic Auditorium

PRESIDENT-ELECT HENRY COOK, Flint, Presiding

L. FERNALD FOSTER, M.D., Bay City and RUTH HERRICK, M.D., Grand Rapids, Secretaries

A. M.

9:30

The Relation of Chronic Sinus Infection to Pulmonary Disease

FERRIS SMITH, M.D., Grand Rapids, Mich.

Graduate University of Michigan Medical School 1910; Instructor in Otolaryngology at University of Michigan, 1910-13; Postgraduate at Vienna and Berlin; began practice in Ann Arbor, 1910, settled in Grand Rapids, 1914; Captain, Royal Army Medical Corps, England, 1916-17; Facial Plastic Surgeon, Queen's Hospital, England, World War; Professor, Plastic Surgery, International Clinic, Paris, 1923-32; Fellow American College of Surgeons (Governor); Member of Oral and Plastic Surgical Society; Author text "Reconstructive Surgery of the Head and Neck."

Chronic bronchitis is commonly associated with chronic sinusitis. The association of the two lesions frequently results in complications, namely, bronchiectasis and pulmonary abscess. The relationship between chronic sinusitis and bronchial asthma. Normal and pathological physiology of the sinus linings. Consideration of the mechanics resulting in droplet infection of the bronchi and of the vascular and lymphatic pathways leading to the same results. Experimental proof. Statistical proof that chronic sinusitis is the common source of chronic bronchitis and pulmonary abscess. Methods of diagnosis and proper management. Lantern slides.

10:00 Yeast Dermatoses—Contact Dermatitis

OLIVER S. ORMSBY, M.D., Chicago, Illinois

Graduate Rush Medical College. Private practice in Chicago since 1901 limited to skin diseases. Clinical professor and chairman department of dermatology, Rush Medical College. Member, American Dermatological Society; Congress of American Physicians and Surgeons; Corresponding member, Section of Dermatology Royal Society of Medicine of London; also of dermatological societies of France and Denmark. Honorary member of Viennese and Japanese Dermatological Societies. Author of the widely used textbook on Diseases of the Skin, as well as many scientific papers.

Under the first title a number of cutaneous and mucous membrane affections are described which formerly were considered separate entities. They include perleche, erosio-interdigitalis, waterbed dermatitis, paronychia, onychia and possible dermatitis seborrhoeica. In addition, a mycotic dermatitis occurs in the axilla, in the submammary and ano-genital regions. On the mucosa in addition to thrush there occurs a monilial stomatitis and glossitis. The recognition of the monilial cause of these affections has favorably altered their therapeutic management. The causative microorganisms include monilia albicans, cryptococci pityrosporon of Malassez and other yeast-like organisms. These can be readily found upon a microscopic examination. They may be successfully managed by the use of gentian violet, potassium permanganate, chrysarobin, iodine and soothing lotions and ointments.

Under the second title are described the large group of cases in which dermatitis is produced by external irritants. They include those described in this country as dermatitis venenata, and the trade and professional dermatitides or exzemas. In the first group a single specific sensitization is present, illustrated in the ivy-primrose and ragweed cases, while in the second, multiple sensitizations are often present. The principal irritants include the plants mentioned, animal proteins (hair, dandruff, feathers), dyes, cosmetics, chemicals and matches. The diagnosis is confirmed by the patch test. Frequently these cases are industrial and then correct placement presents a serious problem for the examining physician.

10:30 INTERMISSION TO VIEW THE EXHIBITS

WEDNESDAY MORNING
September 29, 1937
11:00 What I Do Not Know About Endocrines

A. GRAEME MITCHELL, M.D., Cincinnati, Ohio

Graduate University of Pennsylvania Medical School, 1910. B. K. Rachford, Professor in Pediatrics at the College of Medicine of the University of Cincinnati. Director of Pediatrics and of Contagious Diseases at Cincinnati General Hospital and Medical Director and Chief of Staff of the Children's Hospital, Cincinnati, since 1924. Member of the American Pediatric Society and one of its Council, a member of the Society for Pediatric Research, charter member of the American Academy of Pediatrics, College of Physicians and Surgeons of Philadelphia, Philadelphia Pediatric Society (president 1923), Central Society for Clinical Research, Central States Pediatric Society (president 1931), The Daniel Drake Society (president 1927-28) the Public Health Federation of Cincinnati.

In this discussion there will be mentioned present knowledge of the physiology of the endocrine glands, particularly as this relates to clinical practice. It will be stressed that at the present moment endocrinology is at a dangerous stage since there are now available physiologically and pharmacologically active extracts about which we have little, if any, quantitative knowledge. Formerly endocrinology was in a somewhat futile stage since many of the extracts were either inert or largely so. We have derived knowledge of the functions of the endocrine glands from observations of patients and animals with diseases of them, from the effect of implantation and injection, from the result of total or partial removal. The lecture will largely devolve about a lantern slide demonstration of various patients with disturbance of the endocrine glands. It will be shown that in many of these instances, while deviation from the normal can be diagnosed, it may remain doubtful whether endocrine extracts are indicated or will be helpful.

12:00 The Treatment of Intestinal Obstruction by Aspiration of the Intestinal Content by Means of the Abbott Tube

CHARLES G. JOHNSTON, M.D., Detroit, Mich.

Professor of Surgery, Wayne University College of Medicine, Detroit.

The mortality from intestinal obstruction is too high. The use of the method of suction drainage as popularized by Wangenstein has done much to focus our attention on conservative methods of handling this condition so that only in the more severe cases is it necessary to resort to operation. Suction from a tube in the stomach or duodenum will remove only that fluid and gas brought to the level of the tube, and when successful, only secondarily releases the tension in the dilated loop of gut above the point of obstruction. Enterostomy above the point of obstruction permits the distended loop of bowel to collapse, but requires a laparotomy at a time when it is most likely to be hazardous to the patient. A method for decompressing the small bowel just about the point of obstruction is presented. By this method it is possible to maintain, or at times regain, a fair state of nutrition during the period of decompression. In addition to a discussion of experiences with this method, contraindications to its use are presented.

P. M.

12:30 End of Third General Assembly

Luncheon—

VIEW THE EXHIBITS

WEDNESDAY AFTERNOON
September 29, 1937
Fourth General Assembly
Black and Silver Ballroom, Civic Auditorium

Council Chairman, P. R. URMSTON, M.D., Bay City, Presiding

L. FERNALD FOSTER, M.D., Bay City and

DEWEY R. HEETDERKS, M.D., Grand Rapids, Secretaries

P. M.

1:30 The Problems of the Newer Obstetrics

GEORGE A. KAMPERMAN, M.D., Detroit, Mich.

Graduate of the University of Michigan, 1907. Instructor in Obstetrics and Gynecology at the U. of M., 1907-1912. Now attending Obstetrician and Gynecologist at Harper Hospital, Detroit.

Pregnancy and confinement have in the past always been considered a physiologic process. The rôle of this obstetrician has been to stand ready to assist where nature needed assistance. And on this basis an intelligent expectant waiting has been the fundamental teaching in obstetrics.

In recent years certain leaders in the specialty have come to look on confinement as a pathologic process and have developed a more aggressive attitude.

These aggressive measures have not been an unmixed blessing. In the endeavor to help the parturient in any aggressive way new problems have been created. A discussion of these problems is the chief theme of this paper.

2:00 Diabetes Mellitus in the Obese. Cure by Reduction of Weight

L. H. NEWBURGH, M.D., Ann Arbor, Mich.

Professor of Clinical Investigation, Medical School, University of Michigan. Member of the Association of American Physicians; American Society for Clinical Investigation; Institute of Nutrition; American Association for the Advancement of Science.

A statistical survey of the patients referred to the Diabetic Clinic for treatment has shown that about one-third of those falling in the middle age group were obese. A considerable number of such patients, all of whom had a diabetic glucose tolerance curve, were put on reduction diets. When they had reached normal weight they were given normal diets containing 300 grams of carbohydrate. After a few days, glucose tolerance tests were performed. Without exception these tests were now normal and the urine contained no sugar.

2:30 Optic Neuritis: Its Etiology, Diagnosis and Treatment

WM. L. BENEDICT, M.D., Rochester, Minnesota.

Graduate of University of Michigan, 1912. Head of the Section on Ophthalmology, Mayo Clinic, since May 1, 1917. Professor of Ophthalmology the Mayo Foundation, Graduate School, University of Minnesota. President of the Mayo Clinic Staff from 1932 to 1935, inclusive. Member of American College of Surgeons; American Academy of Ophthalmology and Otolaryngology; American Ophthalmological Society; Minnesota Academy of Ophthalmology and Otolaryngology; American Association for the Advancement of Science; Association for Research in Ophthalmology; American Board of Ophthalmology; Association of Resident and Ex-Resident Physicians of the Mayo Clinic; Sigma Xi and Phi Beta Pi.

The diagnosis of optic neuritis is based largely upon tests of visual function. A history of rapidly decreasing visual acuity and the demonstration of central scotomata are important factors. Changes in the visual field are quite suggestive but not pathognomonic. Examination of the fundus may reveal characteristic changes at the nerve head in some types of optic neuritis, while the absence of changes in other types of optic neuritis is important in the differential diagnosis. A complete clinical examination is necessary for the determination of etiologic factors. Treatment of optic neuritis must be based largely upon a summary of the complete clinical findings. Medical treatment, including fever therapy, has been found to be most effective. A relatively small percentage of cases of optic neuritis are due to pressure on the optic nerve or to pathology in adjacent structures. A résumé of the findings in more than 600 cases of optic neuritis forms the basis of this discussion.

WEDNESDAY AFTERNOON
September 29, 1937

P. M.

**3:00 INTERMISSION TO
VIEW THE EXHIBITS**

**3:30 Diagnosis and Treatment of Cancer of
the Cervix and of the Corpus Uteri**

WILLIAM P. HEALY, M.D., New York, N. Y.
Attending Gynecologist, Memorial Hospital, New York City.

These lesions as a rule are rather slow in establishing themselves.

Symptoms that are easily recognized are usually present even at a relatively early stage of the growth.

The paper will be limited to a discussion of important symptoms, methods of clinical and laboratory diagnosis, therapeutic procedures, surgical, radiation, etc. Lantern slides.

4:00 Recent Advances in Surgery of the Heart

CLAUDE S. BECK, M.D., Cleveland, Ohio
Associate Professor of Surgery, Western Reserve University, School of Medicine, Cincinnati.

Trauma to the heart with special reference to contusions. Nonpenetrating injuries have been overlooked by the profession. They are much more common than gun shot wounds and the stab wounds. Diagnosis. Treatment.

Compression of the heart, acute and chronic. The exact opposite of the dilated heart. Undergoes atrophy disuse. A surgical lesion. Diagnosis. Treatment.

Author's operation for coronary sclerosis—grafting a new blood supply to the heart. Experimental background of the operation. Twenty-eight patients operated upon. Results.

Most of the presentations will be made by motion picture.

**5:00 End of Fourth General Assembly
VIEW THE EXHIBITS**

WEDNESDAY EVENING
September 29, 1937

**Fifth General Assembly
(Public Meeting)**

8:00 P. M.

Main Auditorium—Civic Auditorium

President's Night

WM. A. HYLAND, M.D., Grand Rapids, Treasurer, M.S.M.S., Presiding

L. FERNALD FOSTER, M.D., Bay City, and
E. R. WITWER, M.D., Detroit, Secretaries

1. Call to Order by the President
2. Invocation
REV. HUGH B. KILGOUR, Pastor of the Central Christian Church, Grand Rapids
3. Announcements and Reports of the House of Delegates
4. Welcome to Grand Rapids
HON. TUNIS JOHNSON, Mayor of the City
A. B. SMITH, M.D., President, Kent County Medical Society
5. President's Address
HENRY E. PERRY, M.D., Newberry
6. Induction into Office as President
HENRY COOK, M.D., Flint
Response
7. Introduction of the New Officers of the Michigan State Medical Society
Presentation of the Past Presidents of the Michigan State Medical Society

8. The Medical Profession vs. Syphilis

THOMAS PARRAN, JR., M.D., Washington, D. C.
Surgeon-General, United States Public Health Service.

The fight on syphilis is a drama of medical progress. Once the scourge was hopeless. Medicine could only relieve its symptoms, but could not arrest or cure the disease. Schaudinn, Wassermann, Ehrlich, gave us the weapons and American Medicine has brought the treatment of syphilis to a high degree of perfection. I am proud of the part which the Public Health Service has played in acting as a coordinating agency in the Coöperative Clinical Group studies of syphilis.

These weapons of medicine must be used. Public health and medicine must be organized to apply our knowledge to the eradication of the disease. Administrative methods have been the subject of as intensive study as diagnosis and therapeutics; public health and medical practice are, therefore, quite as subject to change as the last generation's concepts of clinical syphilology. The ability to make these changes within the orientation of professional relationships has been traditional of medicine.

9. President's Reception

All members and guests are invited to meet the president, the officers, councilors and past presidents of the Michigan State Medical Society, and the guest speaker.

**10. Dancing in the Grill Room, Pantlind Hotel
Arranged by the Woman's Auxiliary.
Music by the Kent County Medical Society
Swing Band.**

THURSDAY MORNING
September 30, 1937

Sixth General Assembly

Black and Silver Ballroom, Civic Auditorium

HENRY A. LUCE, M.D., Detroit, Presiding

L. FERNALD FOSTER, M.D., Bay City, and

WARD L. CHADWICK, M.D., Detroit, Secretaries

A. M.

9:30 The Abortion Problem

HAROLD HENDERSON, M.D., Detroit, Mich.

Assistant Professor of Obstetrics and Gynecology, Wayne University, College of Medicine, Detroit.

Included in the discussion are the mortality statistics for the City of Detroit for 1934, 1935, and 1936. The incidence of abortion as a factor in maternal mortality is stressed. The ease with which abortions may be obtained and the relative safety to those engaged in this practice are also emphasized. Suggestions for improvement and a short discussion of the treatment of criminal abortions are also included.

10:00 Acute Laryngotracheobronchitis

PAUL H. HOLINGER, M.D., Chicago, Ill.

Bronchoscopist, Research and Educational Hospital of the University of Illinois; Surgeon in Charge of Peroral Endoscopy, St. Luke's Hospital, Chicago; Attending Bronchoscopist, Children's Memorial Hospital, Chicago; Consulting Bronchoscopist, Illinois Central Hospital, Chicago. Member of Chicago Pathological Society, and the American Bronchoscopic Society.

Laryngotracheobronchitis is an acute infectious disease of the respiratory tract characterized by high fever, croup, and an intense inflammation of the mucous membranes of the walls of the trachea and bronchi. The inflammatory reaction is accompanied by the formation of a sticky, gummy exudate which may partially or completely occlude the airway. Only those cases in which operative intervention is required to keep the airway patent are considered as true cases of laryngotracheobronchitis. Tracheotomy is the procedure of choice, unless relief can be obtained from bronchoscopic aspiration alone, the tracheotomy merely facilitating removal of the obstructing secretions.

The clinical, bronchoscopic, and pathologic aspects are presented. Major emphasis is placed upon therapy and upon the coöperative teamwork necessary between the pediatrician, bronchoscopist and residents in the treatment of these cases.

THURSDAY MORNING
September 30, 1937
**10:30 INTERMISSION TO
VIEW THE EXHIBITS**
11:00 Strabismus

F. BRUCE FRALICK, M.D., Ann Arbor, Mich.

Graduate, University of Michigan, 1927; Instructor in Ophthalmology, University of Michigan, 1929-31; Instructor in Ophthalmology, University of Chicago, 1931-32; Assistant Professor of Ophthalmology, University of Michigan, 1932-33; Associate Professor, University of Michigan, 1933-36; Associate Professor and Acting Head of Department of Ophthalmology, University of Michigan, 1936. In private practice since 1935.

Even though the average physician has now a clear understanding of the factors leading up to strabismus there is still considerable confusion in the minds of our profession at large as to the best method of correcting the defect. This lack of uniform advice given to parents of strabismic children may be in part responsible for the objections to the prescribing of glasses or advising operations upon young children when such are indicated. The importance of the part the general physician and pediatrician can play in the early recognition and treatment of the incipient strabismus patient is emphasized. The cosmetic defect, the functional loss of the visual functions, and the psychological influence on the child are pointed out as subsequent effects of strabismus in the neglected cases. The present concepts of the non-surgical and surgical treatment of squint is considered in view of the progress made during the past ten years.

11:30 The Diagnosis and Treatment of Diseases of the Adrenal Cortex

GEORGE A. HARROP, M.D., Brooklyn, New York

Director of research laboratories of E. R. Squibb & Sons. Former associate professor of Medicine at Johns Hopkins Medical School. Member of American College of Physicians, Association of American Physicians, American Society for Clinical Investigation, and American Clinical and Climatological Association.

A short summary of important recent work on the anatomy and physiology of the adrenal cortex will be given as a background for the interpretation and rational treatment of pathological conditions. These are shown to be due either to hypo secretion or hyper secretion of the adrenal hormones, together with accessory effects produced on the related endocrine glands. The modern methods for the diagnosis and treatment of Addison's disease will be surveyed briefly, together with an analysis of the more recent results which have been obtained with the new therapeutic methods. Finally, a summary will be given of the hyperplasia of the adrenal cortex. The bearing of these disorders on other endocrine abnormalities will be pointed out, and the methods and results of treatment will be discussed.

12:00 Carcinoma of the Right Colon

HENRY K. RANSOM, M.D., Ann Arbor, Mich.

Associate Professor of Surgery, University of Michigan.

Comparison of the right and left halves of the colon from the standpoint of embryology, anatomy and physiology as related to clinical aspects and operative surgery.

A critical analysis of 91 verified cases of carcinoma of the caecum, ascendens, and hepatic flexure. Symptomatology, physical signs and laboratory findings.

Value of palliative operations for inoperable lesions.

Radical treatment—methods of performing hemi right colectomy—relative merits of the various procedures.

Prognosis in carcinoma of the right colon as determined by a study of end results.

P. M.

12:30 End of Sixth General Assembly
LUNCHEON. VIEW EXHIBITS
THURSDAY AFTERNOON
September 30, 1937
Seventh General Assembly
Black and Silver Ballroom, Civic Auditorium

JAMES H. DEMPSTER, M.D., Detroit, Editor, M.S.M.S. JOURNAL, Presiding

L. FERNALD FOSTER, M.D., Bay City, and

WM. R. TORGERSON, M.D., Grand Rapids, Secretaries

P. M.

1:30 The Diagnostic and Therapeutic Value of the Medical Society Study of Cases

GEORGE P. REYNOLDS, M.D., Boston, Mass.

Instructor in Medicine, Harvard Medical School; Junior Visiting Physician, Boston City Hospital, Boston, Mass.

A diagnosis based on history, physical examination and laboratory data without regard to social and psychological factors is unscientific and may be erroneous. Treatment prescribed on the basis of such a study is often impractical or inadequate.

The important contributions to diagnosis, treatment and prevention of disease which can be made by the proper study and evaluation of the social aspects of medical cases is emphasized and illustrated.

The formulation of a program for convalescent care is discussed.

Lantern slides.

2:00 The Psychiatrist's Responsibility Towards the Criminally Insane and Towards Society

FOSTER KENNEDY, M.D., New York, N. Y.

Professor of Clinical Neurology, Cornell University Medical College. Director of Department of Neurology, Bellevue Hospital.

Psychiatry seems to have exceeded its rôle in its tendency to split hairs in Court regarding the mental condition of persons accused of criminal acts. Almost it has come to be assumed that the act of murder ipso facto is evidence of insanity. This extreme view acts as a brake on the already slow wheel of Justice. It would seem proper to determine "responsibility" by a Commission paid by the State rather than by the evidence of psychiatrists engaged by one side or the other. Such a Commission would also impartially advise the conscience of the Court, and supply some technical knowledge as well to the Judiciary. Individualism has weakened the sense of responsibility in the psychiatrist regarding his duty to society as a whole.

2:30 The Types of Gallop Rhythm and Their Significance

FRANKLIN D. JOHNSTON, M.D., Ann Arbor, Mich.

Assistant Professor of Internal Medicine at the University of Michigan Medical School. Member of the Central Society for Clinical Research and the American Society for Clinical Investigation.

When a gallop rhythm is heard on auscultation the characteristic cadence is due to the presence of an extra sound in addition to the first and second heart sounds. This extra sound may occur in early, mid or late diastole or it may be placed in systole. A discussion of the different types of gallop rhythm from the standpoint of the normal and pathological physiology of the heart will be presented. Graphic records of the heart sounds taken simultaneously with an electrocardiogram will be used to illustrate the discussion.

**3:00 INTERMISSION TO
VIEW THE EXHIBITS**
3:30 Curiosities and Rarities in Surgery

JOHN F. ERDMANN, M.D., New York, N. Y.

Born 1864. Graduate Bellevue Hospital Medical College (New York University) 1887. Clinical Professor of Surgery, University and Bellevue Hospital Medical College, New York University, 1893-1908; Professor Practical Anatomy, New York University, 1895-1900; Director and Professor of Surgery, N. Y. Postgraduate Medical School and Hospital of Columbia University 1908-34; Attending Surgeon Postgraduate Hospital since 1934; Chief of Surgical Service, Medical Arts Service; Fellow, American College of Surgeons; American Association of Obstetricians, Gynecolo-

JOUR. M.S.M.S.

THURSDAY AFTERNOON September 30, 1937

gists and Abdominal Surgeons; American Urological Association.

Doctor Erdmann will show a number of lantern slides illustrating rarities and curiosities in surgery such as carcinoma of the male breast, bilateral carcinoma of the female breast, malignancy of the small intestines, obstructive tumors, non-ligant puncture wound of the heart with recovery, postoperative sinuses or fistulae, patient with double right arm and three hands each working individually, mesenteric thrombosis injuries to the bladder, both accidental and operative, wandering spleen with torsion of pedicle, sarcoma of the gall bladder, papilloma of the gall bladder, etc., etc.

4:00 Surgical Problems That Confront the General Practitioner

W. WAYNE BARCOCK, M.D., Philadelphia, Pennsylvania

Professor of Surgery and Clinical Surgery, Temple University, Medical School, Philadelphia, Pa.

The five senses at the bedside, the backbone of diagnosis; wounds that should be closed and wounds that should be opened; the bone setters art; the two great types of infection, one to be treated conservatively the other actively; the relative value of vaccines, antitoxins and chemotherapy; relief of pain by drugs, nerve blocking, manipulation, x-rays, venoms; office anesthesia; the control of hemorrhages by drugs, physical measures, tuberculin, and venoms; the treatment of varicosities and vascular tumors; the principles of treatment of malignant disease.

4:30 END OF SEVENTH GENERAL ASSEMBLY AND CONVENTION

REFERENCE COMMITTEES

On Officers' Reports

Donald R. Brasie, <i>Chairman</i>	J. B. Quick
Roy C. Perkins	R. G. Cook
H. M. Lowe	A. E. Catherwood

On Reports of the Council

Ralph H. Pino, <i>Chairman</i>	T. K. Gruber
G. H. Yeo	W. J. Cassidy
E. O. Foss	O. D. Stryker
C. T. Ekelund	R. C. Jamieson
Dean W. Myers	

On Reports of Standing Committees

Stanley Insley, <i>Chairman</i>	C. E. Toshach
F. J. O'Donnell	A. L. Callery
A. T. Hafford	O. G. Johnson
E. M. Libby	W. R. Clinton
L. W. Day	C. E. Dutches
A. V. Wenger	W. Joe Smith
H. G. Huntington	L. J. Gariepy
D. C. Denman	A. E. Stickley

On Reports of Special Committees

Dean Hart, <i>Chairman</i>	S. C. Mason
W. C. McCutcheon	A. W. Chase
W. E. Tew	Ernest Bauer
Carl F. Snapp	John Sundwall
R. E. Spinks	H. W. Yates
H. B. Hoffman	C. K. Hasley

On Amendments to Constitution and By-Laws

Wm. R. Torgerson, <i>Chairm.</i>	C. F. DeVries
R. B. Harkness	H. M. Best
Wm. C. Ellet	E. D. Spalding

On Resolutions

L. G. Christian, <i>Chairman</i>	J. J. O'Meara
W. A. LeMire	A. L. Arnold, Jr.
Robert Scott	C. E. Umphrey

Credentials Committee

A. G. Sheets, <i>Chairman</i>	C. R. Keyport
	W. D. Barrett

TECHNICAL EXHIBITS

A. S. Aloe Company Space A-2 St. Louis, Mo.

A. S. Aloe Company, in space No. A-2, will display a general line of surgical instruments and equipment for the physician and hospital. The new Aloe Short Wave Diathermy, the Elliott Treatment Regulator, the new de Bakey Blood Transfusion Instrument and other specialties will be featured. Mr. C. R. Habermas, Aloe representative, will supply those interested with brochures on Aloe Steeline, the most modern creation in physician's fine treatment room furniture.

American Seating Company Space F-6 Grand Rapids, Mich.

The American Universal Better-Sight Desk for Schools—accepted by the Council on Physical Therapy of the American Medical Association as a means of minimizing eye-strain and encouraging good posture. Orthopedic Attachments on School Desks for the use of crippled children. Tubular Steel Folding Chair—posturally correct—stable—comfortable—silent—durable—sanitary—for Clinics, Hospitals, Waiting Rooms, etc.

The Arlington Chemical Company Space D-8 Yonkers, N. Y.

The Arlington Chemical Company will again feature their protein and pollen extracts including the \$1.00 diagnostic pollen outfit and their \$25.00 and \$35.00 diagnostic protein outfits. The pharmaceutical line will, of course, be again exhibited. Any physician interested in the subject of allergy may be sure of a courteous reception at the Arlington Chemical Company booth.

The Bard-Parker Company, Inc. Space B-4 Danbury, Conn.

The Bard-Parker Company will demonstrate at Booth No. B-4 the outstanding features of their Rib-Back Blade incorporating new standards of cutting efficiency and economy. Also will be shown a complete line of stainless steel scissors with renewable edges which eliminate resharpening, a selection of quality forceps with the Lahey lock and an interesting demonstration of Rustproof sterilization for surgical instruments with B-P Formaldehyde Germicide.

The Borden Company Space A-4 New York, N. Y.



Borden's Eightieth Year. A warm welcome awaits all physicians at the Borden Booth No. A-4. Specially trained representatives will gladly provide information on Borden products, notably DRYCO, Special DRYCO, KILM, BETA LACTOSE, Merrell-Soule Prescription Products and Borden's Irradiated Evaporated Milk.

Bruce Publishing Company Space G-4 Saint Paul, Minnesota

The Bruce Publishing Company of Saint Paul and Minneapolis, publishers of THE JOURNAL of the MICHIGAN STATE MEDICAL SOCIETY, will have on display in Booth G-4 the recently published work entitled "Medical Writing" by Dr. J. H. Dempster of Detroit, editor of THE JOURNAL. Other periodicals and books of interest to the medical profession will also be shown.

Burroughs, Wellcome & Co., U.S.A., Inc. Space E-3 New York, N. Y.

The Burroughs-Wellcome & Co. exhibit at Booth No. E-3 presents a wide range of new and important advances in pharmacological and chemical research. The following members of our representative staff will be in attendance: Mr. H. F. Emerson, supervising representative; Mr. C. M. Cypher, Mr. G. C. Middleton, Mr. O. J. Williams.

S. H. Camp & Company Space B-10 Jackson, Michigan

S. H. Camp & Company will display an illuminated life size color reproduction of the original "Camp Transparent Woman." Motion pictures depicting scientific features of Camp Supports will also be shown. Personnel from the research and educational departments will be in attendance.

OFFICIAL PROGRAM

Coca-Cola Company **Space B-1**
Atlanta, Georgia
 Coca-Cola will be served the delegates with the compliments of the Coca-Cola Company.

R. B. Davis Company **Space E-2**
Hoboken, New Jersey
 You are invited to visit Booth No. E-2 and enjoy a drink of that delicious and highly nourishing food beverage—Cocomalt. Rich in Iron, Calcium, Phosphorus, Vitamin D, Proteins and Carbohydrates, Cocomalt is refreshing and invigorating.

Detroit X-Ray Sales Co. **Space E-8**
Detroit, Michigan
 The Detroit X-Ray Sales Company takes pleasure in presenting to the medical profession a complete line of shockproof x-ray equipment involving new theories of convenience and enhanced appearance at particularly attractive rates. We extend a cordial invitation for your inspection of this apparatus.

The Doak Company **Space E-6**
Cleveland, Ohio
Sulfur Diasporal: The original colloidal sulfur for treatment of arthritis. For intravenous use, 2 c.c. ampules, representing 10 mg. S (Sulfur Diasporal I.V.), and 5 c.c. ampules, representing 30 mg. S are available. For intramuscular administration, 2 c.c. ampules, representing 24 mg. S (Sulfur Diasporal I.G.), are obtainable. Please request reprints from J. Bone & Joint Surg., Med. Bulletin, Vet. Adm., S. Med. Journal and J.A.M.A.

The Ediphone Company **Space C-8**
Grand Rapids, Michigan
 The Ediphone is a phonographic instrument based on the principle of voice recording discovered by Thos. A. Edison. It fills a special need of physicians—office and hospital use for proper record of case histories. Because of instant availability, histories can be dictated immediately after examination in considerable less time than required under shorthand.

H. G. Fischer & Company **Space A-8 and A-9**
Chicago, Illinois
 We will display, for the first time, our new "100-100" Shockproof X-ray equipment, combined with Counter-Balanced Tilt Table, capable of producing all types of Radiography and Fluoroscopic work in both vertical and horizontal positions. We will also show the latest type Ultra-Short and Short Wave Equipment.

General Electric X-Ray Corporation **Space F-8**
Chicago, Illinois
 A visit to the General Electric X-Ray Corporation's exhibit in space No. F-8 will prove interesting to all who are interested not only in new x-ray apparatus but in improvements for older installations.

Gerber Products Company **Space B-3**
Fremont, Michigan
 The Gerber Products Company in Booth No. B-3 cordially invites you to stop and see its two new products, Strained Apricot and Apple Sauce, and Strained Liver Soup with Vegetables. Gerber's have two types of literature, some for distribution to patients and some for professional use only. Samples of the food and the literature will be sent to visitors at the booth.

Hack Shoe Company **Space G-2**
Detroit, Michigan
 Hack Shoe Company, Detroit, presents a display of correct and corrective footwear embodying the latest in Shoe Therapy. Athletic footwear for the gymnasium, basketball, bowling, squash, handball, etc., vie for attention with Hack-O-Pedic Clubfoot and Surgical Shoes. Children's shoes are shown as well as Hack Shoes for men and women. Hack-O-Meter, an amazingly accurate foot measuring device, completes the display.

J. F. Hartz Company **Space G-5**
Detroit, Michigan
 The J. F. Hartz Company of Detroit, dealers in Physicians', Nurses', Hospital and Sick Room

Supplies, who have been serving the Profession of this state for forty years, will display the New Fischer-therm Short Wave and the Fischer Cold Quartz Lamp. This will be in addition to new instruments and other interesting items.

H. J. Heinz Company **Space D-3**
Pittsburgh, Pennsylvania
 H. J. Heinz Company, makers of the 57 Varieties, invites you to visit their new exhibit, featuring strained foods, breakfast cereals, tomato juice, and olive oil. Stop for a cold drink of Heinz Tomato Juice and register for the fourth edition of the Nutritional Chart. The previous editions were so enthusiastically received that it was thought advisable to make frequent revisions in order to keep abreast with the rapid advances in the field of nutrition.

Holland-Rantos Company, Inc. **Space F-1**
New York, N. Y.
 Pioneers in the ethical distribution of scientific contraceptive specialties—H-R Koromex Diaphragms and Koromex Vaginal Jelly. The Powder Vaginal Insufflator with cinquarsen powder cartridges provides effective treatment in cases of trichomonas vaginitis, now accepted in leading hospitals. Also on display are the Rantos Fever Bag and the Rantosilk pillowslip for allergic patients.

Horlick's Malted Milk Corporation **Space C-6**
Racine, Wisconsin
 You are cordially invited to visit the Horlick's Malted Milk Corporation Exhibit in Booth No. C-6. Your attention is drawn to the special advantages of Horlick's Malted Milk as a nutritious, easily digested food-drink, often acceptable when no other food can be tolerated. Its special value will be pointed out for infant feeding, growing children, nursing mothers, the undernourished, the sick, especially in fever and ulcer diets, the convalescent, and in sleeplessness.

The G. A. Ingram Company **Space E-4 and E-5**
Detroit, Michigan
 The G. A. Ingram Company will show the latest approved Short Wave Unit at their booth. It will be a combined unit, and all the better features will be incorporated, including: a twenty-five meter inductance cable, a fifteen-meter condenser type outlet, and a sixty-five meter outlet for surgical work. This, together with everything new of interest to the physicians will be displayed.

The Jones Surgical Supply Company **Space F-4**
Cleveland, Ohio
 We will exhibit a complete line of surgical instruments, and sundries, short wave diathermy, suction and pressure units, along with numerous specialty items.

The Kellogg Company **Space C-4**
Battle Creek, Michigan
 Kaffee Hag Coffee will be served at the Kellogg booth. Special exhibits showing the stages in decaffeinating are displayed and complete explanation of process is given. Nutrition material and reprints of reports covering research of the effects of caffeine are available.

A. Kuhlman & Company **Space G-3**
Detroit, Michigan
 A. Kuhlman & Company, Detroit, will exhibit a selected line of surgical, diagnostic and treatment instruments and apparatus, including the Elliott treatment regulator, Collins Roth Basal Metabolism apparatus, Infra-red lamp, Cautey, apparatus, National Carbon Lamps, etc.

Lea & Febiger **Space D-4**
Philadelphia, Pennsylvania
 At Space D-4, Lea & Febiger will exhibit many new works, including Atkinson's "The Ocular Fundus," Brahdry & Kahn's "Trauma and Disease," Fishberg's "Heart Failure," Davidoff & Dyke's "Normal Encephalogram," Levinson & MacFate's "Clinical Laboratory Diagnosis," Rowe's "Clinical Allergy," Saxl's "Pediatric Diagnostics," Werner's "Endocrinology," and Wesson & Ruggles' "Urological Roentgenology." New editions will be shown of Cabot's "Urology," Joslin's "Treatment of Diabetes," Bridges' "Dietetics," and many others.

Lederle Laboratories, Inc.**Space C-1****New York, N. Y.**

Lederle Laboratories, Inc., will exhibit a complete assortment of their biological and pharmaceutical products, featuring specific type Antipneumococcic Sera; Neufeld Type Determination Sera; Concentrated Solution Liver Extract in 1 c.c. vials; highly concentrated Cod Liver Oil products. Literature on all Lederle products will be available and display packages of all products will be exhibited.

J. B. Lippincott Company**Space D-5****Philadelphia, Pennsylvania**

A number of new books will be displayed by the J. B. Lippincott Company, including Emerson's "A Textbook of Medicine"; Pfandler and Schlossmann's "Diseases of Children"; McBride's "Disability Evaluation"; Herrmann's "Passive Vascular Exercises"; Peham and Amreich's "Operative Gynecology"; and Kirschner's "Operative Surgery."

Also an entirely new work, just issued, on "The Thyroid and Its Diseases," by Means, showing the results obtained at the Thyroid Clinic of the Massachusetts General Hospital.

M & R Dietetic Laboratories, Inc.**Space D-6****Columbus, Ohio**

M & R Dietetic Laboratories, Inc., Columbus, Ohio, Booth No. D-6, will display Similac and powdered SofKurd. Representatives will be glad to discuss the merits and suggested application of these products.

McIntosh Electrical Corporation**Space F-5****Chicago, Illinois**

A very interesting display of physical therapy equipment will be made by McIntosh Electrical Corporation at Booth No. F-5. Featured will be the Hogan Brevathern Short and Ultra-Short Wave Diathermy Units in models priced for every purse. All attending physicians will be given an opportunity to thoroughly acquaint themselves with the outstanding advantages of McIntosh custom-built apparatus.

Mead Johnson & Company, Inc.**Evansville, Indiana****Space B-5 and B-6**

Mead Johnson & Company are distributing, this year, an unusually fine souvenir item. It is not very beautiful, but extraordinary because it contains no advertising. Ask for your copy of "Parergon." The complete display of Mead Products includes two new ones.

Medical Arts Surgical Supply Co.**Grand Rapids, Michigan****Space C-2 and C-3**

We will have three short wave machines, two suites of physicians' office furniture, two boards of surgical instruments, various examining lamps, and spotlights, one suite of chrome waiting-room furniture, one suction machine, and various other surgical equipment.

Medical Case History Bureau**Space A-7****New York, N. Y.**

Inexpensive Patient's History and Bookkeeping Cards. If you find record keeping an onerous task; if you are interested in a system that shows at a glance the patient's history, the developments, diagnosis and treatments, and the financial status of each case, it will pay you to spend some time in Booth A-7 for the purpose of investigating the Medical Case History Bureau. All charts are shown there as they are actually kept in their cabinets.

The Medical Protective Company**Space A-3****Wheaton, Illinois**

The Medical Protective Company is represented at Booth No. A-3, where you are invited to call. Medical Protective Service is an institution of the Medical profession whose legal liability problems we have concentrated upon for thirty-eight years. Bring your professional liability questions and problems to Booth No. A-3.

Merck & Co., Inc.**Space B-7****Rahway, New Jersey**

Vinethene, a new inhalation anesthetic, is accepted by the Council on Pharmacy and Chemistry for its value in operative procedures of short duration. Vinethene is supplied in a spe-

cial package for the physician's handbag, and because of the rapid induction, adequate relaxation, and rapid recovery produced with its use, Vinethene is a very serviceable anesthetic agent, for such short procedures as reduction of fractures, incision and drainage of abscesses, dilation and curettage, myringotomy, repair of lacerations, and painful dressings.

The Wm. S. Merrell Company**Space B-9****Cincinnati, Ohio**

A number of new and interesting therapeutic agents will be shown at the exhibit of The Wm. S. Merrell Company. One hundred and ten years' experience in the preparation of fine medicinals is the Merrell guarantee of excellence and reliability.

Michigan Branch, American Pharmaceutical**Association****Space D-2****Detroit, Michigan**

During the past year, the American Medical Association has published a series of articles on "The Pharmacopœia and the Physician," in which eminent clinicians have recommended the use of many official medicines and have illustrated their method of treatment by suggesting typical prescriptions. These articles, which cover a wide field of treatment, are briefly described and illustrated.

Middlewest Instrument Company**Space E-1****Chicago, Illinois**

Be sure to stop at Booth No. E-1 when you are visiting the technical exhibits and get a few very interesting and educational facts on the New Jones MOTOR BASAL unit. It is Council accepted, guaranteed for life, contains no water, and embodies many exclusive features which will interest you.

The C. V. Mosby Company**Space A-6****St. Louis, Missouri**

The C. V. Mosby Company will exhibit its complete line of medical books and journals in Booth A-6. Among the newer publications will be Meakins' "Practice of Medicine"; Horsley and Bigger's "Operative Surgery"; Titus' "Management of Obstetric Difficulties." Visitors at the convention are cordially invited to look over these items and other important Mosby publications.

Parke, Davis & Company**Detroit, Michigan****Space G-9, G-10, G-11, G-12**

A number of scientific accomplishments will be displayed by Parke, Davis & Company's staff of expert technical men in charge of Booths G-9, G-10, G-11, and G-12. Products of special interest to the medical profession will be shown, including Mapharsen (the new arsenical for antisyphilitic therapy), Gonococcus Filtrate, Theelin, Theelol, Antuitrin-S, Adrenalin 1:100 with the Adrenalin Vaporizer, Meningococcus Antitoxin, Pertussis Vaccine Immunizing (Sauer), and other Biological products.

The Pelton & Crane Company**Space A-5****Detroit, Michigan**

The Pelton & Crane Company is showing a complete line of Pelton Sterilizers, Lights and Cuspidors. Chief purpose of this exhibit is to provide you with an opportunity to examine Pelton Equipment at your convenience and without obligation.

Pet Milk Company**Space A-10 and A-11****St. Louis, Missouri**

An actual working model of a milk condensing plant in miniature, every part constructed to scale, will be exhibited by Pet Milk Company. It will show the method by which the milk is processed from the time it is received from the farmer until it is sterilized in the can ready for use. A dozen miniature Pet Milk cans, one of which will charm any child patient, will be given to each physician who visits the Pet Milk Booth.

Petrolagar Laboratories, Inc.**Space D-1****Chicago, Illinois**

Physicians are invited to visit the new Petrolagar exhibit, where Mr. Corkery and Mr. Harrison will be in attendance. Scientific drawings and literature on the subject of constipation will be available in addition to samples of the five types of Petrolagar.

OFFICIAL PROGRAM

Philip Morris & Co., Ltd., Inc. New York, N. Y.

Philip Morris & Co., Ltd., Inc., will demonstrate the method by which it was found that Philip Morris cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than ordinary cigarettes in which glycerine is employed.

Physiotherapy Equipment Company Space F-7 Detroit, Michigan

Physicians interested in short wave equipment with perfected dosage control, or combination radiographic fluoroscopic equipment, should visit this exhibit. Mercury Quartz Ultra Violet Lamps (for local and general irradiation) with choice of cold or hot Quartz Spectrums (at the will of the technician) operate from Peerless Short Wave Units.

Physicians Equipment Exchange Space C-7 Detroit, Michigan

The Physicians Equipment Exchange invites your critical inspection of Booth No. C-7, of our moderately priced new and used medical equipment, instruments and short-wave diathermy. We specialize in completely renewed medical equipment that is difficult to distinguish from new equipment at approximately half price.

Picker X-Ray Corporation Space F-3 Chicago, Illinois

Waite Shockproof X-Ray Equipment with Oil-sealed valve tube rectification. Combination Radiographic and Fluorographic units. Mobile and portable Shockproof units.

Professional Management Space G-8 Battle Creek, Michigan

"A Complete Business Service to the Medical Profession." Showing graphically income and expense figures of average Michigan doctors; samples of efficient office records; and reprints from the Michigan State Medical Journal on "The Business Side of Medicine," discussing training of clerical help, supervision of collections, and standardization of office procedures.

Randolph Surgical Supply Company Space H-9 Detroit, Michigan

An opportunity to get a comprehensive picture of the different types of medical office furniture and equipment will be afforded through the Randolph Surgical Supply Company booth. The most recent developments in the Hamilton line will be displayed; also a wide range of surgical supplies, electrical equipment, short wave and diagnostic instruments. Any details and information needed will be gladly given by Clifford and Roland Randolph, who will have charge of the exhibit.

E. J. Rose Manufacturing Company Space B-11 Detroit, Michigan

A complete line of physiotherapy equipment featuring their new variable wave length short wave diatherm and the original cold quartz ultra violet lamps will be displayed by the E. J. Rose Manufacturing Company.

W. B. Saunders Company Space B-2 Philadelphia, Pennsylvania

W. B. Saunders Company will exhibit a complete line of their books. Of outstanding importance is the new Warbasse-Smyth three-volume "Surgical Treatment," Tuft's new work on "Clinical Allergy," Buie's new book on "Practical Proctology," the new Mayo Clinic Volume, Jackson's new book on "Diseases of the Larynx," a brand new, rewritten edition of Cecil's "Medicine," a brand new edition of Bastedo's "Materia Medica," and a number of other new books and new editions.

E. R. Squibb & Sons Space C-5 New York, N. Y.

The complete line of Squibb Vitamin, Glandular, Arsenical and Biological Products and Specialties, as well as a number of interesting new items will be featured, including Protamine Zinc Insulin, Sulfanilamide (the new chemotherapeutic agent for treatment of hemolytic streptococci infections), and a new urinary antiseptic. Well informed Squibb representatives will be on hand to welcome you and to furnish any information desired on the products displayed.

Space B-8

Standard X-Ray Equipment Company Space E-7 Detroit, Michigan

We take pleasure in the fact that the Standard X-Ray Equipment Company has again the opportunity to present to the Medical Profession of Michigan, X-Ray equipment of the latest shockproof design. We extend a cordial invitation to visit the "STANDARD" booth during your sojourn at the Convention.

Van Hoosen Farm Space G-7 Rochester, Michigan

Our display will emphasize three points: (a) The cleanliness and nutritive value of certified milk. (b) The production and importance of Metabolized Vitamin D milk. (c) The high vitamin A content of Holstein Milk.

Wall Chemicals, Inc. Space D-10 Detroit, Michigan

A display of all types of medical gas cylinders and equipment and their different uses in conjunction with gas-ether anesthesia machines and oxygen tents, etc. Complete disassembled valves will also be on exhibit, in order that the medical gas users will be able to gain a better conception of their structure.

Western Electric Hearing Aids Space G-13 Detroit, Michigan

6-A Audiometer sets the standard for measuring hearing—used by leading otologists and specialists.

Hearing Aids—Bone and air conduction—for the patient with impaired hearing. All engineered by Bell Telephone sound transmission experts.

The Zemmer Company Space F-2 Pittsburgh, Pennsylvania

The Zemmer Company, manufacturers of a complete line of ethical pharmaceuticals, will occupy Space F-2. They will display and distribute physicians' samples of a number of their leading products. A cordial invitation is extended to members of the Medical Profession to visit their booth.

The Zimmer Mfg. Company Space B-12 Warsaw, Indiana

The Zimmer Manufacturing Company will display a very complete line of modern fracture equipment. The Zimmer representative in charge will gladly give full information regarding the facilities of making made-to-order braces upon which we specialize and which form an important department in our line.

COUNCILOR DISTRICTS

First District—Wayne.

Second District—Hillsdale, Ingham, Jackson, Eaton.

Third District—Branch, Calhoun, St. Joseph.

Fourth District—Allegan, Kalamazoo—Van Buren, Berrien, Cass.

Fifth District—Barry, Ionia—Montcalm, Kent, Otsewa.

Sixth District—Clinton, Genesee, Shiawassee.

Seventh District—Huron—Sanilac, Lapeer, St. Clair.

Eighth District—Gratiot—Isabella—Clare, Midland, Saginaw, Tuscola.

Ninth District—Grand Traverse—Leelanau—Benzie, Manistee, Wexford (Wexford, Kalkaska, Muskegon).

Tenth District—Bay—Arenac—Gladwin—Iosco, O.M.C. O.R.O. (Otsego, Montmorency, Crawford, Oscoda, Roscommon and Ogemaw combined).

Eleventh District—Mason, Mecosta—Osceola, Muskegon, Oceana, Newaygo, Lake.

Twelfth District—Chippewa—Mackinac, Delta, Luce, Marquette—Alger, Schoolcraft.

Thirteenth District—Alpena—Alcona—Presque Isle, Northern Michigan (Antrim, Charlevoix, Cheboygan, Emmet).

Fourteenth District—Livingston, Lenawee, Monroe, Washtenaw.

Fifteenth District—Macomb, Oakland.

Sixteenth District—Wayne.

Seventeenth District—Dickinson—Iron, Gogebic, Houghton—Keweenaw—Baraga, Menominee, Ontonagon.

HOUSE OF DELEGATES, 1937
MICHIGAN STATE MEDICAL SOCIETY

Names of Alternates appear in italics

Allegan

W. C. Medill, Plainwell.
E. T. Brunson, Ganges.

Alpena-Presque Isle-Alcona

F. J. O'Donnell, Alpena.
A. R. Miller, Harrisville.

Barry

Robert B. Harkness, Hastings.
H. S. Wedel, Freeport.

Bay

Roy C. Perkins, Davidson Bldg., Bay City.
M. C. Miller, Auburn.

Berrien

Wm. C. Ellet, Benton Harbor.
D. M. Richmond, St. Joseph.

Branch

R. L. Wade, Coldwater.
Samuel S. Schultz, Coldwater.

Calhoun

A. T. Hafford, Albion.
Harvey C. Hansen, Central Tower, Battle Creek.
Wm. Dugan, Post Bldg., Battle Creek.
Norman H. Amos, Central Tower, Battle Creek.

Cass

W. C. McCutcheon, Cassopolis.
S. O. Loupee, Dowagiac.

Chippewa-Mackinac

F. H. Husband, Sault Ste. Marie.
W. F. Mertaugh, Sault Ste. Marie.

Clinton

Dean W. Hart, St. Johns.
F. D. Richards, DeWitt.

Delta

W. A. LeMire, Escanaba.
None named.

Dickinson-Iron

E. M. Libby, Iron River.
W. H. Alexander, Iron Mountain.

Eaton

A. G. Sheets, Eaton Rapids.
Paul Engle, Olivet.

Genesee

Robert Scott, 1215 Detroit St., Flint.
Donald R. Brasie, 907 Citizens Bank Bldg., Flint.
F. E. Reeder, 808 Genesee Bank Bldg., Flint.
Donald Wright, 1326 S. Saginaw St., Flint.
Dale Kirk, 300 E. First St., Flint.
R. S. Halligan, 405 E. First St., Flint.

Gogebic

W. E. Tew, Bessemer.
W. H. Wacek, Ironwood.

Grand Traverse-Leelanau-Benzie

E. F. Sladek, Traverse City.
C. E. Lemen, Traverse City.

Gratiot-Isabella-Clare

Myron Becker, Edmore.
A. L. Aldrich, Ithaca.

Hillsdale

L. W. Day, Jonesville.
A. W. Strom, Hillsdale.

Houghton-Keweenaw-Baraga

J. B. Quick, Laurium.
Alfred LaBine, Houghton.

Huron-Sanilac

*D. D. McNaughton, Argyle.
None named.

Ingham

L. G. Christian, 108 E. St. Joseph St., Lansing.
C. F. DeVries, 320 Townsend St., Lansing.
R. L. Finch, 124 W. Lenawee St., Lansing.
J. F. Sander, 320 Townsend St., Lansing.
P. C. Strauss, Bauch Bldg., Lansing.
C. D. Keim, 108 E. St. Joseph St., Lansing.

Ionia-Montcalm

A. I. Laughlin, Clarksville.
Harold M. Fox, Portland.

Jackson

Philip A. Riley, 500 S. Jackson St., Jackson.
J. J. O'Meara, Peoples National Bank Bldg., Jackson.
H. A. Brown, 701 Reynolds Bldg., Jackson.
C. S. Clarke, 605 Dwight Bldg., Jackson.

Kalamazoo-Van Buren

R. G. Cook, 22 McNair Bldg., Kalamazoo.
R. J. Hubbell, 1311 American National Bank Bldg., Kalamazoo.
Chas. Ten Houten, Paw Paw.
J. G. Kingma, Decatur.
J. P. Gilding, Vicksburg.
A. E. Pullon, Kalamazoo.

Kent

A. V. Wenger, 302 Loraine Bldg., Grand Rapids.
Leon Sevey, Medical Arts Bldg., Grand Rapids.
Wm. R. Torgerson, Metz Bldg., Grand Rapids.
Carl F. Snapp, Medical Arts Bldg., Grand Rapids.
Paul Kniskern, City Hall, Grand Rapids.
Geo. H. Southwick, 55 Sheldon Ave., S. E., Grand Rapids.
O. H. Gillett, 601 Metz Bldg., Grand Rapids.
Paul Willits, Medical Arts Bldg., Grand Rapids.
Ward S. Ferguson, 6 Park Place, Grand Rapids.
John Wenger, Coopersville.

Lapeer

H. M. Best, Lapeer.
D. J. O'Brien, Lapeer.

Lenawee

A. W. Chase, Adrian.
Geo. C. Hall, Adrian.

Livingston

H. G. Huntington, Howell.
J. J. Hendron, Fowlerville.

Luce

R. E. Spinks, Newberry.
A. T. Rehn, Newberry.

Macomb

R. F. Salot, 67 Cass Avenue, Mt. Clemens.
M. C. Smith, S. Gratiot Ave., Mt. Clemens.

Manistee

E. A. Oakes, Manistee.
L. W. Sweitzer, Manistee.

Marquette-Alger

Vivian Vandeverter, Ishpeming.
R. A. Burke, Palmer.

Mason

H. B. Hoffman, Ludington.
W. S. Martin, Ludington.

Mecosta-Osceola

G. H. Yeo, Big Rapids.
Jacob Bruggema, Evart.

* Deceased

OFFICIAL PROGRAM

Menominee

S. C. Mason, Menominee.
A. R. Peterson, Daggett.

Midland

Robert Rice, Midland.
None named.

Monroe

D. C. Denman, Monroe.
None named.

Muskegon

E. O. Foss, Peoples Bank Bldg., Muskegon.
L. E. Holly, 876 N. Second St., Muskegon.

Newaygo

O. D. Stryker, Fremont.
None named.

Northern Michigan

Antrim, Charlevoix, Emmet and Cheboygan

W. O. Larson, Grayling.
F. C. Mayne, Cheboygan.

Oakland

Ernest Bauer, Hazel Park.
C. T. Ekelund, 906 Riker Bldg., Pontiac.
None named.
None named.

Oceana

Walter M. Lemke, Shelby.
N. W. Heysett, Hart.

O.M.C.O.R.O. (Otsego-Montmorency-Crawford-Oscoda-Roscommon-Ogemaw)

C. R. Keyport, Grayling.
C. G. Clippert, Grayling.

Ontonagon

E. J. Evans, Ontonagon.
J. L. Bender, Mass.

Ottawa

A. E. Stickley, Coopersville.
D. C. Bloemendal, Zeeland.

Saginaw

L. C. Harvie, 405 Wiechmann Bldg., Saginaw.
C. E. Toshach, 333 S. Jefferson Ave., Saginaw.
O. W. Lohr, 302 S. Jefferson Ave., Saginaw.
W. J. O'Reilly, 832 Hoyt St., Saginaw.

Schoolcraft

A. R. Tucker, Manistique.
James Fyvie, Manistique.

Shiawassee

A. L. Arnold, Jr., Owosso.
None named.

St. Clair

A. L. Callery, Peoples Bank Bldg., Port Huron.
T. E. DeGurse, Marine City.

St. Joseph

R. A. Springer, Centreville.
None named.

Tuscola

O. G. Johnson, Mayville.
T. E. Hoffman, Vassar.

Washtenaw

J. A. Wessinger, 339 E. Washington, Ann Arbor.
Dean W. Myers, 317 S. State St., Ann Arbor.
John Sundwall, 1832 Vinewood Ave., Ann Arbor.
S. L. LaFever, 216 S. State St., Ann Arbor.
H. B. Britton, Ypsilanti.
Warren E. Forsythe, University Health Service, Ann Arbor.

Wayne

T. K. Gruber, Eloise Hospital, Eloise.
L. J. Hirschman, 7815 E. Jefferson Ave., Detroit.
Grover C. Penberthy, 1515 David Whitney Bldg., Detroit.

H. A. Luce, 629 David Whitney Bldg., Detroit.
J. M. Robb, 641 David Whitney Bldg., Detroit.
A. E. Catherwood, 1337 David Whitney Bldg., Detroit.

W. D. Barrett, 311 David Whitney Bldg., Detroit.
R. H. Pino, 1001 David Whitney Bldg., Detroit.
H. W. Plaggemeyer, 1701 David Whitney Bldg., Detroit.

Wm. R. Clinton, 113 Martin Place, Detroit.
Wm. J. Stapleton, Jr., 641 David Whitney Bldg., Detroit.

R. C. Jamieson, 1309 David Whitney Bldg., Detroit.

E. D. Spalding, 662 Maccabees Bldg., Detroit.
R. C. Andries, 1737 David Whitney Bldg., Detroit.

H. W. Yates, 1229 David Whitney Bldg., Detroit.
Wm. J. Cassidy, 1737 David Whitney Bldg., Detroit.

*John L. Chester, 1742 Maccabees Bldg., Detroit.
H. F. Dibble, 1313 David Whitney Bldg., Detroit.

C. E. Dutchess, c/o Parke, Davis & Co., Detroit.
A. P. Biddle, 638 David Whitney Bldg., Detroit.

J. H. Andries, 402 David Whitney Bldg., Detroit.

A. W. Blain, 2201 E. Jefferson Ave., Detroit.
C. E. Umphrey, 13331 Livernois Ave., Detroit.
P. L. Ledwidge, 1818 David Whitney Bldg., Detroit.

L. J. Garipey, 932 Maccabees Bldg., Detroit.
D. I. Sugar, 7310 Grand River Ave., Detroit.
C. K. Hasley, 1429 David Whitney Bldg., Detroit.

Earl Krieg, 1842 David Whitney Bldg., Detroit.

J. A. Hookey, 655 Fisher Bldg., Detroit.
S. W. Insley, 1302 Maccabees Bldg., Detroit.

Basil L. Connelly, 944 Maccabees Bldg., Detroit.
Wm. S. Reveno, 951 Fisher Bldg., Detroit.

C. F. Brunk, 7815 E. Jefferson Ave., Detroit.
Allan McDonald, 1340 Maccabees Bldg., Detroit.
F. W. Hartman, Henry Ford Hospital, Detroit.

B. U. Estabrook, 602 Maccabees Bldg., Detroit.
R. L. Clark, 917 Forest Ave., Detroit.

M. H. Hoffmann, Eloise Hospital, Eloise.
C. K. Valade, 1604 Eaton Tower, Detroit.
C. R. Davis, 6150 W. Fort St., Detroit.

L. J. Bailey, 510 Professional Bldg., Detroit.
S. E. Gould, 1432 Longfellow, Detroit.

E. R. Witwer, Harper Hospital, Detroit.
C. E. Simpson, 1210 Kales Bldg., Detroit.
F. J. Kilroy, Receiving Hospital, Detroit.

W. P. Woodworth, 2994 Grand Blvd., E., Detroit.
W. L. Hackett, 710 David Whitney Bldg., Detroit.

L. O. Geib, 3528 Van Dyke Ave., Detroit.
Edward Dowdle, 1044 Maccabees Bldg., Detroit.
B. I. Johnstone, 555 Fisher Bldg., Detroit.

G. L. McClellan, 1424 Maccabees Bldg., Detroit.
L. T. Henderson, 13038 E. Jefferson Ave., Detroit.

S. A. Flaherty, 6058 W. Fort St., Detroit.
W. C. C. Cole, 5140 Second Blvd., Detroit.

B. H. Priborsky, 742 Maccabees Bldg., Detroit.
L. W. Shaffer, 1305 David Whitney Bldg., Detroit.

M. Rice, 14302 Schoolcraft, Detroit.
I. S. Gellert, 1229 David Whitney Bldg., Detroit.
J. W. Hawkins, 4741 Spokane Ave., Detroit.

Don A. Cohoe, 13535 Woodward Ave., Detroit

Wexford

W. Joe Smith, Cadillac.
John Carrow, Marion.

*Deceased.

ANNUAL REPORT OF THE COUNCIL

At the regular Midwinter Meeting of the Council in Detroit on January 20-21, 1937, the Council approved the suggestion that its Annual Report be developed in advance of the Annual Meeting, insofar as possible, and published in the Delegates' Handbook with the Reports of Committees, in order that the transactions of the Council may be studied in detail by members of the House of Delegates and of the Society.

Fourteen Meetings

The Council held four meetings and the Executive Committee convened ten times since the 1936 session of the House of Delegates—a total of 14 meetings. All Councilors and officers received announcements and agendas of all meetings of the Executive Committee during the past year; the augmented attendance testified to the intense interest of those who are working in behalf of the Society.

Practically all of the items of the increased business of the State Society and its 17 committees were considered at these meetings, and many decisions of importance to the medical practitioner and the profession as a whole were made during the past year. Decisions of the Executive Committee and of The Council were published in *THE JOURNAL* and made the subjects of letters to the County Medical Society officers, in order to keep the membership fully informed.

Membership

Members in good standing as of December 31, 1936, totaled 3,725, an increase of 72 over the previous year. The membership as of July 31, 1937, totaled 3,757, an increase of exactly 300 over the same period in 1936. This will be increased by the time of the Annual Meeting in September.

Finances

The Financial Report for the year 1936 was satisfactory in comparison with the preceding year. The Auditors' Report has been printed in *THE JOURNAL*, and needs no extended discussion at this time. It is noted that the Present Worth was \$19,738.92, an increase of over \$4,000.00, due in part to the increase in the market values of the securities owned by the Society.

The Council feels that certain of the depreciated securities have now reached the highest market price that they are likely to, and is taking steps to convert some of those into securities of the highest possible rating in order to avoid possible eventual depreciation.

It is rather difficult to estimate how the current year will come out from the financial standpoint. It is already apparent, however, that certain of our expenditures have shown a marked increase for this year, especially in the expenses of certain of our Committees, and it seems likely that this year will show a deficit at its close. If the Society is to continue its strong financial position and to extend the many activities which it has initiated, it may be well to contemplate a nominal increase in dues for the year 1938.

Journal

Owing to the fact that this has been a legislative year, the *JOURNAL* has somewhat enlarged its function in keeping with the demands of the time. Every important movement of a medical nature in the legislature has been reported. In addition to this, the texts of five important laws, namely, the Basic Science Law, the Occupational Diseases Law, the Prenuptial Physical Examination Law, the Act permitting the teaching of social hygiene in public

schools and the Old Age Assistance Law, have been printed in full with appropriate editorial comment. Every item on the agenda of the meetings of the Executive Committee of The Council has been given space so that the membership of the society at large has had an opportunity to keep in close touch with the work of the executive committee. The *JOURNALS* for the first half of the year have aggregated 435 pages of reading matter, as compared with 432 for the similar period in 1936. We have endeavored, it will be seen, to keep the *JOURNAL* about the usual size without enlarging or diminishing it. In spite of it all, the cost of printing and publication has advanced due to increased costs of labor, paper and ink. The advertising matter in the *JOURNAL* has kept up in quantity. If we are to have a uniform size annual volume, it can be done by increasing the number of advertising pages.

The May, 1937, issue carried the printed roster of membership. This number was beautified with a special cover and called the "Directory Number." Another special cover has been designed for the September issue, which is designated as the "Grand Rapids Number." A number of new advertising accounts have been secured for these special souvenir editions, some of which remain as regular advertisers.

In the makeup of the *JOURNAL*, it will be seen that an attempt has been made on the part of the editor and Mr. Burns to make the advertising pages more attractive by carrying such reading matter as the General News Department, the Michigan Department of Health, Book Reviews and miscellaneous items through the advertising section. Experience has proved this to have been a wise venture.

It is the aim of The Council to keep the membership informed concerning every activity of the State Society through the columns of *THE JOURNAL*.

Post-Graduate Activities

The Committee on Post-Graduate Medical Education has continued to expand its unique program. New centers for courses have been added throughout the state and its resident courses in Ann Arbor and Detroit elaborated. The committee has made valuable contributions to County Society programs, in addition to its regular courses. The detailed report of this committee appearing in the Handbook sets forth statistically the enthusiasm with which the work of this committee is being received by the profession of the state.

On June 16, 1937, the Committee on Post-Graduate Medical Education recommended the establishment of an endowment fund of \$500,000 for post-graduate medical education, to be secured during the next five years; \$125,000 of this amount is already assured. The Council is favorable to this proposed endowment and has requested the Post-Graduate Committee to make a further study of the proposal. Additional post-graduate work, in the nature of "refresher courses" was enjoyed during the past year by physicians in the upper part of the state, through the combined efforts of the State Society and the State Department of Health and the Crippled Children Commission. We urge the augmenting of post-graduate work which may be the solution for some of the problems which face the profession.

Legislative Activity

This year the Michigan Legislature met in Lansing during the first six months. The session was the longest in its history. Several bills of great interest to the medical profession were considered. Among the most important were Basic Science, Welfare and Relief, Occupational Disease, Venereal Disease and Control, and revisions of the Afflicted-

Crippled Child Laws. Through the Society's Legislative Committee, the Council was in close contact with the activities of the legislature. The legislature was favorable to the medical program, thanks to the tremendous work of the Michigan State Medical Society Legislative Committee and the help and co-operation of county societies' legislative and policy committees, and all "key-men," family physicians of legislators, and interested laymen throughout the state, who contacted legislators, wrote letters, circulated petitions and the legislative brochure to aid the passage of the Basic Science Law which is one of the most progressive acts safeguarding the health of the people of the state. Good health legislation has come from the unified effort and untiring work of the Michigan medical profession. Too much credit cannot be given to the chairman of the Michigan State Medical Society Legislative Committee, Dr. L. G. Christian of Lansing, who practically closed his office and worked night and day in this battle to have basic science placed on the statute books of Michigan. Great and sincere thanks are also due President Henry E. Perry of Newberry, who left his practice and spent five months in the Capitol City to aid the passage of the important health measures before the legislature. The recommendation of the Legislative Committee that a Michigan Health League be formed should be heartily endorsed and immediately put into action. It will be the beginning of a new era in matters of health protection and preservation.

Officers and Organization

Due to greater organizational activity during the past year, the state officers, councilors and committeemen have had greater demands made upon their time. The principle of having each county society officially visited by their state officers and committeemen annually was inaugurated this past year. While practically every one of the fifty-four county societies has had an official visit by one or more of the state officers, there has been held twenty-one "State Society Night" meetings throughout the state. At these meetings the various phases of the Michigan State Medical Society's activities and organizations have been presented. These meetings have aroused greater interest in the state society on the part of the individual members. They have served to revive the less active component units with the result that the state organization has been considerably strengthened.

The annual Secretaries' Conference was held in Lansing on February 7. Most of the county medical societies were represented. Two Legislative Conferences were held during the past year, one in Lansing on December 6 for the 44 county medical societies in the Lower Peninsula, and one in Marquette on December 13 for the ten county medical societies of the Upper Peninsula. These meetings were conducive to increased activity throughout the state and greater esprit de corps for the county and state medical societies.

During the month of August, a number of your state officers toured the Upper Peninsula and paid an official visit to each of its ten county units.

The results of organizational stimulation is evidenced by:

- (1) Increased memberships.
- (2) More and regular meetings by the county units.
- (3) More prompt responses to inquiries and questionnaires from the executive office.
- (4) Keener coöperation in such important activities as legislation, et cetera.
- (5) Greater interest in post-graduate medical education.

- (6) The county societies' greater number of requests for assistance from the Michigan State Medical Society in local organization, securing speakers, and advice in health matters.
- (7) An apparent appreciation of the state society's efforts to assist its county units.

Physicians Addressing Lay Groups

A number of Service clubs and Civic groups were addressed by your state society secretaries during the past year as part of the public relations program of the Michigan State Medical Society. The Council feels that physician-members of civic groups, P.T.A.'s, Service clubs, et cetera, should request an opportunity to present talks on such subjects as "What the Medical Society Does for Your Community," and "The Evils of Socialized Medicine Schemes," instead of waiting to be asked to give such talks.

County Societies

The committee on County Societies reports that for the majority of societies this has been an unusually good year. The membership of the state society is now well over thirty-seven hundred. Most scientific programs have been well worked out. Many of the smaller societies have been assisted in securing speakers through our executive office. There has been a definite increased interest in organizational affairs due to a considerable extent to the interest aroused by the constructive legislative program.

We feel that in spite of these excellent reports there is still much to be desired. We have a few societies that are nearly moribund. There are a few others that definitely need stimulation. While our increased membership is encouraging, there are still many eligible physicians outside the fold.

We would recommend that more aggressive action be taken by the state society in reorganizing and rejuvenating the weaker county societies. We feel that every society should be visited by some of the officers of the state society at least once a year. Societies should be urged to give some time in their programs for organizational and economic discussions. State society nights should be arranged particularly for those counties which have not held them.

Committees

The detailed activity of the Michigan State Medical Society is best appreciated by the committee work during the past year. The suggestion has been made that the society developed an excessive number of committees, there being at the present time nine standing committees and twelve special and sub-committees. A perusal of the work of these committees is evidence of the fact that an efficient execution of their projects could not be had with a lesser number. The large number of committees has served to make active more individual members of the state society and to have more persons intimately conversant with the many scientific and economic phases of organized medicine.

The work of the Legislative Committee, already outlined, has been most outstanding this year. It realized all of its objectives and established a new respect for organized medicine.

The committee on Economics has been ever mindful of the growing Socio-Economic problems facing the medical profession. It has zealously studied the various phases of medical economics and has made valuable proposals and suggestions consistent with the Society's programs.

The Joint Committee on Health Education, composed of twenty-five organizations interested in health education, has assumed the vital responsibility

OFFICIAL PROGRAM

bility in publicizing health activities to the lay public, bearing in mind at all times the viewpoint of the physician. The Society appreciates the splendid manner in which this committee has developed a co-operative effort between the profession and lay health agencies. The Joint Committee is now headed by Dr. B. R. Corbus of Grand Rapids whose zeal and interest augers for greater accomplishment.

The Public Relations Committee has been able this year to devote its activities to greater county society organization. Last year it lent its efforts to the development of the "Filter System." Since the Society's major activity this year was a legislative one, the activity was of necessity executed almost wholly by the Legislative Committee and the Executive Office. All the councilor districts have been contacted this year by members of the Public Relations Committee, and the projects of all the committees have been publicized and integrated by the committee. The plan this year of appointing the Secretary of the Michigan State Medical Society as Chairman of the Public Relations Committee has enabled much of the committee's detail to be carried out through the secretary's office.

The Preventive Medicine Committee has continued and enlarged its splendid program initiated several years ago. The work of the committee has become so comprehensive that there has been continued the Sub-Committee on Tuberculosis and the more recent appointment of a sub-committee on Venereal Disease Control. This latter committee has developed for Michigan a model program which is now in the hands of United State Surgeon General Thomas Parran (with whom the Executive Committee of the Council met on November 11, 1936) who has been advised that the state society is ready to proceed with the plan *now*.

This activity will be financed by the National Social Security Act, and has received the endorsement of the Michigan Department of Health. The work of the Preventive Medicine Committee, which also involves the problems of the County Health Units, is ever increasing in scope and importance.

The Cancer Committee has undertaken a most ambitious program this year and reflects an unusual interest on the part of the committee and the splendid coöperation of the public as well as the members of the profession. Their report is most imposing.

The Executive Board for Medical Defense has continued its usual important function and has been ever mindful of its responsibility to the profession.

The Ethics Committee is the latest addition to the list of Standing Committees. Its creation was occasioned by an attempt to assist the county components, especially the smaller units, in solving their local problems of ethics. Fortunately few serious situations have been brought to the Committee's attention. The Committee fills a long felt need, however, in the ranks of organized medicine in the state.

Of the special and sub-committee activities, too much commendation cannot be given. The Radio Committee has carried out a splendid publicity health program over ten radio stations in Michigan.

The Woman's Auxiliary Committee has assisted in developing a number of new auxiliaries throughout the state.

The Maternal Health Committee has conducted, with splendid coöperation of the State Health Department, the U. S. Public Health Service, and other collaborating agencies, an outstanding program of Post-graduate Education, Maternal Health Survey and lay publicity along the lines of Material Health and Child Hygiene.

The Mental Hygiene Committee has conducted a

fine educational program this year. Their activities have been carried on both with the county medical societies and with lay groups throughout the state. This program has been very significant at this time when the State of Michigan has been faced with the serious problem of institutionalizing the increasing number of mentally sick people. The program has also included information along the lines of preventive measures in mental hygiene.

The Contact Committee to Governmental Agencies was untiring in its efforts and lent valuable assistance to the Legislative and other committees in their widespread activities.

The Liaison Committees to the Hospital Association, the State Bar, and allied professions of Dentistry, nursing and Pharmacy, have worked diligently along the lines of better coöperation and the future development of a Michigan Health League. This latter development has in other states served an apparent much needed purpose. These committees have an opportunity to make a very valuable contribution to the public health and welfare by developing a better understanding and coöperation between the various professions.

Schedules A, B, C, D:

The final adoption of fee schedules for medical care of crippled and afflicted children was delayed for months on two counts: (a) because the legislature was amending the laws; (b) because of the request of the radiological group that it be properly recognized. This matter was finally solved in August, 1937, and fee schedules to run to March 1, 1938 (according to the law) were adopted.

Admission policy at U. of M. Hospital:

A special committee of The Council to study the admission policy of the University Hospital, found that complaints were frequently the results of misunderstandings, recommended that any physician who feels he has been unfairly treated should send this committee data as to names and dates, and a full investigation will be made. The committee stated that errors may occur, but they are apparently infrequent.

A division of tuberculosis has been developed in the State Health Department, in accordance with your recommendations.

The program on mental hygiene has been developing with great strides, and we are happy that able leaders in the medical profession are guiding this serious and important work.

The latest committee to be appointed was an Advisory Committee to the Parole Board of Michigan. The work of this committee will do much to develop a better coöperative effort between our State Penal institutions and the medical profession, a field heretofore untouched by the state society.

Your attention is invited to the detailed reports of the above committees in the Handbook as they will be presented to the House of Delegates. The reports reflect the tremendous sacrifice of time and effort made by the many committeemen of the state society, a sacrifice designed to develop a greater field of coöperative effort between the multitude of agencies engaged in health activity, to the end that organized medicine shall assume its place of leadership in all matters of health.

In developing an aggregate coöordinative plan, your council chairman has, this year, requested a monthly report of all committees so that the Executive Committee of the council might, at all times, be conversant with and cognizant of the many ramifications of committee activity.

Every committee is deserving of unlimited commendation for its contribution to the efforts of organized medicine.

OFFICIAL PROGRAM

At the beginning of this year all committee chairmen were called in conference to project their year's work so that coordinating and integrating plans could be made, whereby the Michigan State Medical Society might, at the end of the year, emerge with a fully developed program which would reflect an aggregate effort to place organized medicine and the Michigan State Medical Society in the position of responsibility which we now see it assuming in the health problems of Michigan, each effort having in mind, *first*—the welfare of the public, *second*—the resulting welfare of the physician.

1937 Annual Meeting

Your Annual Meeting marks the inauguration of many innovations. It is realized that the Annual Session should serve largely the general practitioners. To that end there has been a radical change made in the program arrangement. Aside from one session of Section Meetings, at which special subjects may be discussed and officers elected, all sessions will be of a general character. Each paper may be heard by every member present and in the aggregate will present a fine post-graduate course covering every field of scientific medicine. The program presents in General Assemblies twenty-nine speakers, twenty of whom are from outside of Michigan, men of national prominence in the profession. The President's Reception, a new feature, will be held Wednesday evening, September 29th.

Realizing that from the standpoint of economy the Scientific Exhibit is a liability, it has been eliminated for this year, compensation being had in providing a scientific program of an unusual high quality.

A very important feature of an Annual Session is its Technical Exhibit of seventy-one spaces. This phase of the meeting is not only instructive and educational but the revenue largely provides for the operation of the meeting. Appreciating the contribution of the sixty-five exhibitors, the physical arrangement of the booths and exhibits this year are so provided that every registrant must pass each display. Recesses are arranged in each General Assembly so that ample time may be spent with the exhibitors.

The City of Grand Rapids, with its great Civic Auditorium, has made it possible to hold the entire session under one roof. This fact, together with a fine scientific program and unexcelled hotel accommodations, bespeaks an ideal Annual Session.

Progress

When we look back just one or two years and review the recommendations of the various Michigan State Medical Society Committee as presented to the House of Delegates, we begin to realize how much progress has been made in this brief period of time by the Michigan State Medical Society. It is interesting to note that all the recommendations of the Legislative Committee made in 1935—eight points—have now been carried out, except the complete organization of the Michigan Health League, which is now being formed. All three recommendations re Relief Medicine, made to the House of Delegates in 1935 and approved by it, have now been carried out through the passage of the welfare laws by the 1937 Legislature. We may expect greater things of the future, with continued unity and activity in our own ranks, augmented by cooperation from the other health groups and interested members of the laity. Our whole structure depends upon allegiance of the practitioner of medicine to his county medical society which exists only for the betterment and

welfare of the physician-member and the people whom he serves.

Respectfully submitted,

P. R. URMSTON, *Chairman*

F. T. ANDREWS	WILFRID HAUGHEY
F. A. BAKER	T. F. HEAVENRICH
F. C. BANDY	R. H. HOLMES
W. E. BARSTOW	HARLAN MACMULLEN
A. S. BRUNK	W. A. MANTHEI
H. R. CARSTENS	J. E. MCINTYRE
H. H. CUMMINGS	V. M. MOORE
I. W. GREENE	FRANK E. REEDER
B. H. VANLEUVEN	

ANNUAL REPORT OF THE LEGISLATIVE COMMITTEE

"Outside of the Governor's program," wrote W. A. Markland, legislative correspondent for the *Detroit News*, in his résumé of Michigan's legislative accomplishments (*Detroit News* of Sunday, June 27, 1937), "the bills approved which are of greatest general interest are those requiring basic science training for those practicing the healing art, . . . requiring prenuptial physical examinations, and permitting the teaching of sex hygiene in the public schools."

A realization of the importance of the Michigan State Medical Society's legislative program of 1937 is thus expressed by a correspondent who is expert in evaluating legislation. The full import of this legislation, and its value to the public in the years to come, may not now be as apparent even to doctors of medicine as it is to their friends in the Michigan Legislature and to the gentlemen of the press who reported the recent Legislature's progress in the Capitol City from week to week.

The Basic Science Act (House Bill No. 261) was enacted into law after two of the most controversial sessions which the House and Senate have ever experienced in Lansing. An account of the amount of work necessary to build up the overwhelming majorities in the House (73 to 21) and in the Senate (28 to 1) in favor of this legislation would fill several volumes. It is interesting to note the striking majority obtained in the Legislature as a whole. Out of a possible 131 votes, 101 were in favor of Basic Science. Only 22 of the 131 were against this public health measure. The sincere thanks of the Michigan State Medical Society are extended to these 101 intelligent and health-minded members of the Michigan Legislature, all of whom staunchly supported the medical profession and its legislative program because they were convinced it constituted good, sound public policy.

Suffice it to say that many labored and gave unanimous support and "follow through" to your Legislative Committee—the family physicians of legislators, key-men in every county in the state, chairmen and members of county medical society policy and legislative committees, Roland T. Lakey, Dean of the School of Pharmacy of Wayne University, Alexander G. Ruthven, President of the University of Michigan, presidents of colleges and superintendents of schools who read the bill and gave it their hearty endorsement, friends of medicine, men holding elective offices in the State government, and dozens of representatives of industry—all were of invaluable aid with advice, work and encouragement. We appreciate the help of representatives of the press who wrote fully and fairly of our efforts and views. To all these and many others who gave us aid, medicine in Michigan owes a debt of gratitude.

OFFICIAL PROGRAM

The legislative program of the Michigan State Medical Society in 1937 was successful

(a) because of the many factors enumerated above;

(b) because of the untiring work of President Henry E. Perry, who left his practice in Newberry and spent his entire time in Lansing contacting his old friends in the Legislature, and out of his legislative experience giving valuable aid and guidance to your Committee. Mr. Wm. J. Burns, our efficient Executive Secretary, worked with your Chairman and Committee day and night. There was no task too irksome, no hours too long for Bill. **He was our contact man;**

(c) because of a far-sighted Council of the Michigan State Medical Society which cooperated to the fullest extent with your Legislative Committee;

(d) because the officers of the various county medical societies kept up interest within their membership;

(e) because the Delegates to the State Meeting efficiently performed their function as contact men between the county society and the state society.

Much Legislation of Interest to Physicians

In addition to the Basic Science Law, the 1937 Legislature passed the following eighteen acts which are of importance and interest to the doctor of medicine:

1. The appropriation for the Basic Science Board (H.B. 581).

2. The appropriation for syphilis control—\$50,000 (H.B. 581).

3. The law providing for medical examination as a prerequisite to obtaining a license to marry (H.B. 459).

4. The law to amend the educational act to permit the teaching of social hygiene in schools by qualified physicians (H.B. 520).

5. The law providing compensation for occupational diseases (S.B. 106).

6. Occupational Disease reporting (H.B. 536).

7. Laws reorganizing the entire welfare machinery of the state and the administration of penal institutions (S.B. 111, 112, 113, 114, 117). Specifically in S.B. 111, a Medical Division under the State Department of Public Assistance was approved, as well as the important principle of the physician-patient relationship.

8. The liberalization of old age assistance, and the insertion of an appropriation sufficiently generous to permit reimbursements to doctors of medicine for emergency medical care of old age recipients (S.B. 115).

9. The hospital building program (H.B. 306).

10. Recodification of Afflicted and Crippled Child Laws (H.B. 202 and H.B. 400).

11. Enlargement of the jurisdiction of Probate Courts with respect to hospitalization of afflicted adults (S.B. 116).

12. A law regulating strictly the growth and sale of marijuana and other narcotic crops (H.B. 565).

13. Divorcing the State Hospital Commission from the State Welfare Department and revising laws under which it operates (S.B. 118).

14. Law revising the Unemployment Compensation Act to eliminate the exemption of \$6,000.00 per employer and inserting in lieu thereof an exemption of employers having 8 or less employees (S.B. 270).

15. Making it a felony to steal articles from automobiles (H.B. 483).

16. Law to protect the blind of Michigan (H.B. 56).

17. Law governing unethical practice or advertising of optometry (H.B. 639).

18. Law to provide for treatment and compensation of typhoid carriers (H.B. 421).

In addition to the above legislation, the following bills were proposed in the last session of the Legislature, but were not enacted into law:

1. Providing for non-profit hospital service plan of insurance—Group Hospitalization (S.B. 274). This bill died in the Senate Insurance Committee.

2. A bill to create the "School of Medicine of Osteopathy" so osteopaths could practice in public hospitals and institutions (H.B. 650). Died in the House Public Health Committee.

3. Bill providing that fees of physicians who act as medical examiners and as experts in compensation work shall be limited, and collectable from the employe (H.B. 126). Passed by the House, but died in the Senate Labor Committee.

4. Bill regarding re-registration of chiropractors under certain new regulations (S.B. 275). Died in Senate Public Health Committee.

5. Bill to prohibit unethical advertising by dentists (H.B. 594). Passed the House but was defeated in the Senate.

6. Bill to prevent the spreading of venereal diseases and to provide for the treatment of persons who are pregnant (H.B. 659); unfortunately this good proposal died in the House Public Health Committee, due to strong pressure from a minority group.

7. Bill to revise the laws relative to the Probate Court, in which physicians have a big interest, was passed by the House, but was too large a task for the Senate to take on in the closing days of the session (H.B. 381).

8. H.B. 552, an Occupational Disease Bill. Died in House Labor Committee.

9. H.B. 558, the Supervisors' proposal to create County Welfare Commissions, and prescribing regulations. Died in the House Social Aid and Welfare Committee.

Experience gained in this legislative session has convinced your Legislative Committee that it is utterly impossible for its members and your Executive Secretary to attend adequately to the diversified legislative interests of the doctors of medicine in this State. Few legislative contact men in Lansing have more than three or four bills to watch. Medicine had an interest in more than thirty this session!

Recommendations

Continued contact of the Legislator by his physician-constituents during the off-year of the Legislature and support of friends of public health in the next Primary and General Elections is not only important but vital and necessary to Medicine.

We would, therefore, recommend the formation of a "Michigan Health League," composed of physicians, dentists, nurses, pharmacists, funeral directors, and laymen interested in health. Our experience in contacting this group regarding the welfare bills proved helpful and most pleasant. We have the assurance of all of these groups that they are anxious for the formation of such an organization. Similar associations are now in existence in other states. The Health Leagues in Arizona and of California each successfully carried a referendum general election, in favor of good medicine. The Washington State Health League has successfully defended its Basic Science Law and all other interests of the allied health professions.

We recommend that the President of the Michigan State Medical Society appoint a committee to confer with these various Michigan health organizations and instruct (or empower) such committee to form a Michigan Health League.

We recommend to The Council and the House of Delegates of the Michigan State Medical Society

that the State Department of Public Assistance be contacted relative to the early establishment of a medical division, as authorized by S.B. 111, and that the State Society offer its advice and assistance in outlining the duties of the medical director.

Your Legislative Committee has spared neither time nor effort in its campaign. We believe that in our aggressiveness we have gained the respect of the legislators, the elective officers of the State of Michigan, the press, and the general public. It is highly important that during the coming year this confidence be built up. To this end we recommend that no aggressive legislative program be planned for the next session of the Legislature.

Again, to all the thousands of our Society members who responded to our appeals, we thank you most heartily.

L. G. CHRISTIAN, M.D., *Chairman*
 L. H. BARTEMEIER, M.D.
 HENRY COOK, M.D.
 J. W. HAWKINS, M.D.
 WM. A. HYLAND, M.D.
 PHILIP A. RILEY, M.D.
 W. E. E. TYSON, M.D.
 PAUL R. URMSTON, M.D.
 J. B. BRADLEY, M.D., *Advisor*

ANNUAL REPORT OF ADVISORY COMMITTEE ON GROUP HOSPITALIZATION

(A Sub-committee of the
Legislative Committee)

This committee was created for the purpose of studying group hospitalization in general, and the Group Hospitalization proposal of the Michigan Hospital Association, in particular.

Each member has made a study of the subject of group hospitalization, and invites the attention of the membership to the excellent articles on this subject appearing in *The Journal of the American Medical Association*.

Your committee conferred with representatives of the Michigan Hospital Association re its first draft of a Hospital Insurance bill. This proposal was subsequently withdrawn and the President of the M.H.A. stated to The Council of the Michigan State Medical Society, at the Midwinter Session of January 20, 1937, that he would accept the A.M.A. recommendations, give them study, and that no conflicts would arise; when the proposed bill is rewritten by the Michigan Hospital Association, the President would get in touch with this committee.

The second bill, as introduced into the Legislature on April 21, and known as S.B. 274, was particularly indefinite regarding what services should be considered hospital services and what should be considered medical services, merely stating "any care * * * such as is customarily administered to similarly afflicted patients by the hospital." The proposal died in the Senate Insurance Committee.

Without permissive legislation, any hospitalization service plan in Michigan will undoubtedly be considered by the Attorney General and by the Commissioner of Insurance to be a contract of insurance, whether the corporation or organization attempts to call it by some other name or whether the term "insurance" nowhere appears in the contract. An insurance contract is not to be settled by the nature and organization of the association but rather by the terms and character of the contract itself. This particularly applies to several attempts of laymen to organize and operate hospitalization service bureaus in Michigan.

Group hospitalization or Group Insurance has been held repeatedly in Michigan to be insurance.

The generally accepted definition of insurance throughout this country appears in the case of *Rosenhouse v. Issac Seeley*, 72 Mich. 603: "An agreement by which one party for a consideration promises to make a certain payment of money upon the destruction or injury of something in which the other party has an interest."

The American Medical Association, at its 1937 meeting in Atlantic City, was asked to define just what are hospital services and medical services in relation to group hospitalization. The A.M.A. House of Delegates recommended "That the contract benefit provided by group hospitalization insurance should be limited to the room, bed, board, nursing facilities ordinarily provided by hospitals, and routine medicine. * * * In regard to certain benefits offered by many hospital insurance plans, combining professional and technical services, we are in complete sympathy with those who would make every possible provision to prevent inclusion of any and all types of service involving medical care."

Recommendations

Your committee recommends: 1. The continuation of the study of Group Hospitalization, and its advantages or disadvantages to the people of Michigan; 2. that the Legislative Committee of the M.S.M.S. be authorized to collaborate with a committee of the Michigan Hospital Association in considering permissive legislation for a prepayment plan for hospital services, exclusive of medical care, and to report back to their corresponding organizations for the mutual approval or disapproval, before submission to the Legislature for possible enactment.

It must be understood that this action in no way obligates the Michigan State Medical Society to any views on the question of group hospital insurance; it is felt, however, that this is a problem for study and discussion, and points out the very urgent necessity of just such complimentary committees from the two organizations contacting each other to discuss their various problems.

Respectfully submitted,

HENRY COOK, M.D., *Chairman*
 WM. A. HYLAND, M.D.
 T. K. GRUBER, M.D.

ANNUAL REPORT OF THE JOINT COMMITTEE ON HEALTH EDUCATION

Fifteen years ago the Michigan State Medical Society begot the Joint Committee on Public Health Education. The conception of the idea that health education should be carried to the public through machinery already set up, and through a neutral body, rather than a source which might be accused of self-interest, came from Doctor Wm. J. Kay, then president of the Michigan State Medical Society, and Doctor J. B. Kennedy, then chairman of the Educational Committee. The idea concerned itself with "the development of a plan for a series of medical lectures to be undertaken jointly by the Medical Society and the University."

The sympathetic support of Doctor Marion Burton, then president of the University, made the plan possible. In Doctor W. D. Henderson, Director of the Department of University Extension, the committee found an enthusiastic advocate who gave freely and abundantly of his time from the plan's very inception until his retirement this year. To him the major credit must be given for the sustained activity and expansion of the program.

The child so begot has now reached a healthy adolescent period. More units, some twenty odd, have joined the original two, and the committee is now prepared to enter a broader field of health education.

Among the many excellent forward-looking activi-

ties sponsored by the Michigan State Medical Society, I question if there has developed anything more distinctly worth while than this Joint Committee. Throughout the years the Society has continued its interest in the work and today is the group's most important affiliate.

The President of the University of Michigan has acted as chairman of the Joint Committee since its formal organization. At the last meeting President Ruthven, because of the multiplicity of his committee assignments and his "firm belief that the chairmanship should be held by different individuals from time to time," requested that the Committee choose a new chairman. His resignation was accepted with regret. The Committee has profited greatly by his advice and encouragement, and it hopes to have his continued support, as well as the support and advice of Vice-president J. D. Bruce who, in addition to frequently presiding in the absence of President Ruthven, has, for many years, given much time and thought to the Committee's activities, and has been especially active in the development of the new program. Doctor Burton R. Corbus was elected chairman at this meeting.

When in 1935 the Joint Committee decided upon a revision of its activities and of its program, an executive committee was formed consisting of the chairman of the Joint Committee, the director of the Department of University Extension, B. W. Carey of the Couzens Fund, Mabel E. Rugen of the School of Education of the University, and Marjorie Delavan, of the State Department of Health. The members of this committee headed the different subcommittees—Administration, Scientific Program, Health Education in Schools, and Adult Health Education. The Committee continues to operate as a part of the University Extension Department, C. A. Fisher, director, and employs a full time field secretary, Clare Gates.

Health Education in Schools

In furtherance of this new program it is proposed to bring a plan of health education for the child to the teacher. This new approach on the part of the Joint Committee will endeavor to reach the school child through a coördinated health instruction program. It is the outgrowth of the earlier and not too effective lecture series program before high schools of the state, which, for several years, was given by physicians.

The activities of this subcommittee can be divided into two main divisions: (1) the development of curriculum materials; and (2) the means for improving the in-service and pre-service health education of teachers. Three pieces of material are being prepared for use early this fall: (1) Problem finding and problem solving material has been prepared and used on a test basis with a representative number of teachers. This material has been evaluated and is being revised. (2) A study of successful health practices in use in various schools of the country will serve as a basis for another piece of curricular material for teachers. (3) Material dealing with pertinent health problems for the use of parents and teachers is also being prepared. It is hoped that these three pieces of material will help to meet the longfelt need for better teacher preparation in health matters.

This summer, a program of the Committee is being initiated through health education conferences at two state Teachers Colleges, one on July 16 at Mt. Pleasant, the other, a two-day program, on July 27-28, at Kalamazoo. In addition, the program of the Committee will be presented to the county commissioners of schools at their annual meeting during the week of August 16 in Mt. Pleasant.

Adult Health Education

It is expected that the Adult Health Education Committee will coördinate its program with the school health program which is being initiated this year. Means will be provided for various state and local groups to conduct coöperatively programs of special interest.

Cancer Prevention

During this past year a statewide cancer educational program was conducted through the Joint Committee, under the direction of the Cancer Committee of the Michigan State Medical Society and in coöperation with the state officers of the American Society for the Control of Cancer. This program was as follows:

The Cancer Committee of the State Medical Society had begun an educational program through articles in the press of the state, but it did not have the machinery for conducting a well organized attack. At the request of the Cancer Committee, a thirty-page booklet was printed, several sets of slides for illustrated lectures were made, and a group of physicians, carefully selected, were appointed to give a series of illustrated lectures.

In coöperation with this program, the State Department of Health prepared and printed 100,000 four-page descriptive leaflets on cancer, and prepared brief articles for use by the various monthly publications issued in the State.

The American Society for the Control of Cancer organized its Women's Field Army under the able leadership of Mrs. M. R. Keyworth of Detroit.

The Joint Committee acted as the Liaison agency between all these organizations and assumed the responsibility of scheduling the speakers and distributing the pamphlet and leaflet material.

General Lectures

For many years the Joint Committee has responded to requests for speakers on health subjects to be given before adult audiences, and especially before Rotary Clubs, Women's Clubs, P.T.A.s and allied groups. Last year in response to such requests and in addition to the 102 talks that were given on cancer, there were 53 talks given on mental hygiene and 52 talks on general health subjects. This activity will be continued and expanded this coming year.

Health and Hygiene Column

The daily and weekly health and hygiene column is now sent to eleven daily and twelve weekly newspapers. In addition, county health unit directors also receive the releases and use the articles in a number of local newspapers. During the year the editors accepted and published articles concerning the prevention of syphilis and gonorrhea, marking a rather notable advance in public health instruction. The use of these columns by the public for information on health problems continues in popularity, as indicated by the receipt of about 500 inquiries per month, chiefly from readers of the *Detroit News*. This activity has long been one of the fixed activities of the Committee, and although requiring a considerable expenditure, it is believed to be thoroughly worth while, and will be continued.

Radio Program

The Joint Committee coöperated with the Radio Committee of the Michigan State Medical Society and initiated a series of eighteen weekly broadcasts on medical subjects over eleven radio stations in the state. The series, to be continued next year, will consist of 24 broadcasts over the same stations, and possibly two additional ones.

The Joint Committee and the State Society

The Michigan State Medical Society should be especially interested in the development of this robust child now assuming a large responsibility in the social order. There is nothing like this unique co-operative group in this country. The machinery sits in place prepared to bring to the public a knowledge of the best things in health, hygiene and medicine. It is a program promoted not by physicians alone but by all the organizations of the state who are interested in health education, working as a unit. Originated by the Society for the purpose of forcefully bringing to the attention of the public these matters, the State Society could well use this opportunity in a greater degree than it ever has.

We are not the only State Society that has felt the obligation to bring health education to the public. Some state societies have expended a very considerable amount of money in this effort. We do not believe, however, that any state society has succeeded in doing as much along this line as has been done in Michigan. Definitely, the people of Michigan are health conscious to a most satisfactory degree. With vigor we now propose to push forward a program whose limits will be set only by the interest of the group and the available funds for operation.

Respectfully submitted,

BURTON R. CORBUS, M.D., *Chairman*
A. W. BLAIN, M.D.
L. FERNALD FOSTER, M.D.
J. B. JACKSON, M.D.
W. C. McCUTCHEON, M.D.

ANNUAL REPORT OF THE COMMITTEE ON MEDICAL ECONOMICS

The problems of the Economics Committee are based on the fact that there is a direct relationship between the quality and distribution of medical care and the cost of medical care.

As civilization and medical care become more complicated, the medical profession has to concern itself increasingly with the Economics of Medicine. The greater the extent to which the medical profession concerns itself and leads the way in this combined ECONOMIC-SERVICE relationship, the better will be the medical service and the less the cost commensurate with the quality of the service.

The preservation of Health and the treatment of disease are more and more demanded as the possibilities of Preventive and Therapeutic measures become known. These health factors will increasingly become a part of the American way of life.

The Welfare Group

Based on the above considerations, therefore, your Economics Committee has given its chief efforts in this legislative year to the medical amendment to the Welfare Bill (Senate Bill No. 111) which, if it can be carried out, should provide good medical care for all those on welfare in this state, and provide compensation to all who give that care. Certain specifications added to the amendment will eliminate Wayne County from coming under the medical amendment. It is to be hoped that the results obtained in other parts of the state will be such as to make it appear desirable later for Wayne County to come under the provisions of the amendment.

It would seem that one of the major efforts of the State Society this year, in relation to welfare medicine, may well be an educational effort to the end that the possibilities for good, both to the public and the medical profession, of this amendment may be gotten under way.

The Committee has given much attention and en-

couragement to certain amendments to the Crippled Child, Afflicted Child and Afflicted Adult bills. These amendments tend to preserve the physician-patient relationship, provide means of decreasing medical care at public expense to the undeserving, and provide for the payment of bills for medical care directly to those who gave the service. The Committee believes these amendments essential to the best interests of all concerned.

The Low Income Group

Persistently, as during the past few years, your Committee has encouraged study and experimentation in post-payment methods for this group. Surely if a patient has not the ready cash for medical care, he should have a systematic method placed at his disposal, to care for the required services on a post-payment basis if he desires. Methods seem now to be near completion whereby such a course can be financed. This problem is one which should be studied by the Economics Committee during the coming year and then developed throughout the state as time and experience warrant. The procedure being sponsored by the Wayne County Medical Society through its Medical Service Bureau bids fair to provide an outlet for the Probate Court also, which will relieve the public of much expense by making it unnecessary for many without ready cash to become county cases.

Group Hospitalization

No legislation was passed during this session making Group Hospitalization possible in Michigan for at least two years.

Old Age Pension Group

Ways and means are now being studied for care of this group. There is considerable evidence that they will have to be classified and cared for from the medical angle the same as the Welfare Group.

Respectfully submitted,

RALPH H. PINO, M.D., *Chairman*
F. A. BAKER, M.D.
H. F. BECKER, M.D.
S. W. INSLEY, M.D.
HAROLD MILLER, M.D.
J. M. ROBB, M.D.
FERRIS SMITH, M.D.
C. S. TARTER, M.D.
C. E. TOSHACH, M.D.
R. G. TUCK, M.D.

ANNUAL REPORT OF THE CANCER COMMITTEE

The activities of the Cancer Committee in the past year have been chiefly educational and have been directed in a large measure toward the general public. The methods employed have consisted in the distribution of literature and cancer talks to lay audiences. These talks have been given by the members of the Cancer Committee and Sub-committee, which covered, geographically, the entire state. Twenty thousand cancer booklets have been printed, and over half of these have been distributed. The cost of preparation of these booklets has been borne by the Michigan State Medical Society and the Joint Committee on Health Education. Honoraria and expenses to speakers have been paid by the Joint Committee. The arrangement of speaking dates and schedules has been most efficiently handled by the Secretary of the Joint Committee and without this assistance the Cancer Committee's activities would be greatly handicapped. The distribution of one hundred thousand pamphlets by the State Board

of Health has greatly assisted in the program. The Cancer Committee and Joint Committee participated in the recent cancer drive by the Field Army of the American Society for the Control of Cancer.

At this time plans for the coming year are being formulated. All federated women's clubs have been requested to include cancer talks in their public health programs. In the past year one hundred fifty-five cancer talks were given to lay audiences and eighteen to medical audiences. In the next year the Committee feels that at least 300 cancer talks should be given to lay audiences. Existing facilities are sufficient to accommodate an enlarged program. Considerable additional expense, however, will be incurred and thought should be given to methods of accumulating funds for this purpose.

In the past year cancer education has been extended almost entirely to adult groups. The Committee believes that in the future two other lines of endeavor should be attempted. First: Cancer information should be disseminated to younger groups, including the last two years in high school. Such a program might encounter certain obstacles in the matter of pedagogical technic but, nevertheless, it cannot be denied that high school and college groups are eager for this knowledge, would profit greatly by it and would spread the truth about cancer to those more liable to be affected. Secondly: It is believed that the medical profession has been somewhat neglected in the matter of cancer education. The cancer program could receive more sympathy and enthusiastic support from certain sections of the medical profession. It is believed that in the next year more of the Cancer Committee's activities should be directed toward the medical profession.

It is believed that a fairly satisfactory start has been made along cancer educational lines in this state. However, the surface has only been scratched and several years of more intensive work will be necessary before cancer mortality will be visibly affected.

OSBORNE A. BRINES, M.D., *Chairman*
F. A. COLLIER, M.D.
ALFRED LABINE, M.D.
A. B. MCGRAW, M.D.
H. J. VANDENBERG, M.D.
C. V. WELLER, M.D.

ANNUAL REPORT OF THE COMMITTEE ON PREVENTIVE MEDICINE

This committee held two meetings during the past year: On November 29, 1936, as guests of Dr. Claude Keyport at Grayling, Michigan; on January 3, 1937, as guests of Dr. J. J. O'Meara, at his office, Peoples National Bank Building, Jackson; and then adjourned to the Jackson Prison to be the guests of the warden and prison staff.

Various activities have been considered, namely:

A. County Health Units

The Preventive Medicine Committee has for the past several years gone on record as favoring the formation of County Health Units (not practicing units), and wishes again to call the Society's attention to the advantages which may be obtained under such a plan. Also to the fact that Federal funds are now available for such purposes.

B. Bureau of Tuberculosis

The State Health Department has established a Bureau of Tuberculosis as requested by the State Medical Society, with Dr. A. W. Newitt and staff in charge. This bureau should coördinate the tu-

berculosis activities of the state. The functions of this bureau were outlined in the reports of this Committee for the past two years, but it is deemed wise that they should be repeated in this report:

1. Case Finding by

(a) Stimulating interest in diagnosis and case reporting by private physicians, by

1. Instruction—postgraduate in coöperation with the University.
2. Assistance in providing x-ray facilities.
3. Proper reimbursement of physicians for diagnosis and care of indigents.
4. Aid in placement for care.
5. Check-back on all reported cases for examination of contacts.

(b) Lay education in tuberculosis, by

1. Coöperation with existing organizations, such as the Michigan Tuberculosis Society, and the Preventive Medicine Committee of the State Medical Society.

2. Hospitalization by

- (a) Insistence that counties properly assume financial burden of care of indigents.
- (b) Studying available facilities for care and supervising care, utilizing all available tuberculosis beds and using beds in general hospitals where proper facilities exist.
- (c) Recommending additional facilities where definitely needed.

3. After Care and Follow-up, by

- (a) Looking after proper placement of patient after hospital treatment is over, by referring to proper medical care at home, and to proper rehabilitation assistance as far as can be provided in needful cases.

C. Advisory Committee on Syphilis Control

This report to be given by the Chairman, Dr. Loren W. Shaffer.

D. Medical Coördinator

A request for funds to employ a Medical Coördinator is being considered by the Kellogg Foundation. Briefly, his duties would be to spread the gospel of Preventive Medicine throughout the state, bringing the advances in technic of the various tests to the doctor in his own office, also giving talks before medical societies and lay groups. He should bring all health agencies to a better common understanding.

E. Medical Externes for Hospital at Jackson Prison

At a meeting of this Committee at Jackson, Dr. D. P. Phillips, of the Parole Board, asked this committee to contact the University of Michigan and Wayne University in regard to supplying externes for the state prison of southern Michigan. The above medical schools have agreed to coöperate in this matter. It is suggested that possible contacts could be made with medical service departments of other state, county, or municipal institutions, which might be of mutual benefit to all parties.

F. County Society Meetings

The Committee suggests that at least one meeting a year of every county medical society be devoted to a program of Preventive Medicine (economic and scientific). This program could be jointly sponsored by the County Preventive Medicine Committee, with the state, county, or local health department.

G. Regional Conferences

The recommendation of last year is repeated. "That one day of each Regional Conference be devoted to Preventive Medicine and Public Health."

Respectfully submitted,

L. O. GEIB, M.D., *Chairman*
J. D. BROOK, M.D.
G. M. BYINGTON, M.D.
A. L. CALLERY, M.D.
R. B. HARKNESS, M.D.
R. M. MCKEAN, M.D.
J. J. O'MEARA, M.D.
G. C. STUCKY, M.D.
R. L. WADE, M.D.

ANNUAL REPORT OF THE ADVISORY COMMITTEE ON SYPHILIS CONTROL PROGRAM

(Sub-committee of Preventive Medicine Committee)

Committee: L. W. Shaffer, M.D., Chairman, Detroit; Udo J. Wile, M.D., Ann Arbor; John Lavan, M.D., Grand Rapids; R. S. Dixon, M.D., Detroit; C. R. Hills, M.D., Battle Creek.

Advisors: L. O. Geib, M.D., Detroit; A. P. Bidle, M.D., Detroit; C. C. Slemmons, M.D., Lansing; H. F. Vaughan, M.D., Detroit.

Since the formation of the Committee the following members have been added:

Wm. A. Hyland, M.D., Grand Rapids; Chas. P. Drury, M.D., Marquette.

Two meetings of this committee have been held. The first meeting was held at the University Hospital, Ann Arbor, Sunday, Dec. 20, 1936, at 2 P. M. The purpose of this meeting and actions taken are reported in detail in the appended minutes.

The second meeting was a joint one with the Preventive Medicine Committee held in the office of Dr. J. J. O'Meara, Jackson, Mich., at 11:45 A. M., Sunday, Jan. 31, 1937. The minutes of this meeting, with the report of the Advisory Committee on Syphilis Control, are also attached, together with the approved program of Venereal Disease Control for Michigan.

No further meetings have been called. We have felt that no further action was indicated by our Committee until such time as some funds were available to carry out the recommendations of our approved program.

In retrospect we might state that this Committee could have assumed a more active status of medical guidance in bills before our State Legislature referring to syphilis control, such as the one requiring certification for marriage. We should have had some organized medical pressure behind the one requiring Wassermann tests during pregnancy and the request for more adequate state funds for syphilis control from our legislators. Part of the present state appropriation of \$50,000 for syphilis control, we understand, is to be spent in supporting additional laboratory expense entailed by the new act requiring certification of freedom from venereal disease for marriage licenses and the supplying of free drugs for indigent patients. This latter activity may make medical guidance advisable as soon as the State Department of Health has set up tentative plans of the amount of money to be spent and a method of distribution for such drugs.

A further activity could well bring medical pressure on the State Department of Health suggesting approval or reporting cases of venereal disease by initials and numbers instead of by name only, as at present.

These latter opinions are simply personal ones

with the Chairman, who believes action on these questions could well be requested at a future meeting as soon as types of drugs to be supplied and methods of distribution are seriously considered by our State Health Department.

Respectfully submitted,

LOREN W. SHAFFER, M.D., *Chairman*
R. S. DIXON, M.D.
C. R. HILLS, M.D.
JOHN LAVAN, M.D.
UDO J. WILE, M.D.
CHAS. P. DRURY, M.D.

ANNUAL REPORT OF THE COMMITTEE ON POSTGRADUATE MEDICAL EDUCATION

I. Since the last annual report of the activities of the Advisory Committee on Postgraduate Education, two meetings have been held. The transactions of the first meeting, held on December 9, 1936, were published in full on page 117 of the February, 1937, issue of THE JOURNAL. A brief summary of this meeting is as follows:

There was general agreement upon the content of the 1937 program; also, that the course of eight days, with the present hours, should be continued except in the northern district, where the hours are to be from 1 to 4 p. m.; that Petoskey be added to the Traverse City-Manistee-Cadillac center, with two days assigned to each; that if after beginning the course a physician be prevented from attending through illness or an unavoidable cause, he receive the lecture series volume upon application, but not be given credit; that Alpena be given four speakers during the winter, the expense of these to be defrayed from State Society funds.

II. The second meeting of the Committee was held on May 27, 1937, at the Wayne County Medical Society Building, Detroit. The complete minutes of this meeting are as follows:

The meeting was called to order by the chairman of the Committee, Dr. James D. Bruce. All members of the Committee were present with the exception of Dr. George A. Kamperman, Dr. J. H. Powers, Dr. R. R. Smith, and Dr. T. G. Yeomans. At the request of the chairman, Dr. L. Fernald Foster, Dr. Paul R. Urmston, Dr. J. Milton Robb, and Dr. H. H. Cummings attended this meeting.

The chairman reviewed the work of the past year and showed by statistics the healthy growth of the postgraduate work. The enrollment in the Department of Postgraduate Medicine from July 1, 1936, to June 1, 1937, is as follows:

<i>Short, intensive courses:</i>	
1. Pediatrics	43
2. Practitioners' Course.....	34
3. Proctology	40
4. Genito-urinary Diseases.....	12
5. Gynecology, Obstetrics and Gynecological Pathology	19
6. Surgery	39
7. Diseases of Blood and Blood-forming Organs	28
8. Electrocardiography	9
9. Diseases of Metabolism.....	9
10. Ophthalmology and Otolaryngology.....	60
Personal Courses	318
<i>Extra-mural Courses:</i>	
1. Battle Creek-Kalamazoo	165
2. Bay City	162
3. Flint	197
4. Grand Rapids	224
5. Lansing-Jackson	223
6. Traverse City-Manistee-Cadillac	79
7. Upper Peninsula.....	57
	1107
	1461

(592 attended 50% or more of the presentations.)

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Out-of-the-state programs directly under this Department:

1. Lincoln, Nebraska	300
2. Youngstown, Ohio	500

The following states are represented in the attendance:

1. Alabama	1
2. California	1
3. Illinois	4
4. Indiana	9
5. Iowa	1
6. Kentucky	2
7. Massachusetts	1
8. New Brunswick, Canada	1
9. New York	8
10. New Jersey	1
11. Ohio	45
12. Ontario, Canada	9
13. Oklahoma	2
14. Pennsylvania	2
15. Texas	2
16. Wisconsin	3
<hr/>	
	92

The subject of supplying speakers for county societies throughout the state was discussed. It was the unanimous opinion that the Michigan State Medical Society should supply the speakers from its Speakers' Bureau, with the assistance of the Department of Postgraduate Medicine of the University.

A motion by Dr. C. C. Slemmons, seconded by Dr. A. P. Biddle, to remunerate all teachers in postgraduate work at a uniform rate was unanimously passed.

The matter of supplying a syllabus or book covering the lectures given during the practitioners' courses was fully discussed. A motion by Dr. C. T. Ekelund, seconded by Dr. R. B. Allen, to mail a copy of the book to each physician enrolled in the courses, and to bill each physician for one dollar (an explanatory letter to accompany the bill) was carried.

The chairman reviewed the work done during the past year by the Joint Committee on Health Education and gave a statement of the expenses incurred in furthering the program of the Cancer Committee of the Society.

Dr. P. R. Urmston called attention to some confusion that arose last year over arrangements for chairmen and committees in the various teaching centers in the State. Dr. Grover C. Penberthy offered a motion, seconded by Dr. R. B. Allen, that each councilor in the district where the meetings are held, be instructed to make local arrangements in the teaching centers, or to appoint a committee to do this work. This motion was unanimously passed.

Dr. R. B. Allen suggested that teachers be informed earlier of their subjects and the place of the meeting in the Detroit programs so that they may have ample time for preparation.

Dr. P. R. Urmston suggested that the noon recess during the lectures be shortened to one-half hour.

The matter of giving a certificate to physicians attending the practitioners' courses was fully discussed. The plan of having this certificate issued by the Michigan State Medical Society was enthusiastically supported by all present. The chairman suggested that the form of this certificate should be decided upon during the present year in order to have it in readiness for those completing the requirements in 1938.

A motion by Dr. P. R. Urmston was unanimously passed to send Dr. James D. Bruce to Atlantic City, on June 10, 1937, to represent Michigan at a meeting of a group interested and active in postgraduate medical education.

Dr. R. B. Allen stated that Wayne University would be in a position next year to make a modest contribution to the financing of the postgraduate work.

Dr. P. R. Urmston stated that the matter of finan-

cial aid for postgraduate medical work to be given by the Michigan State Medical Society during the next year would be discussed at the next meeting of the Executive Committee of the Council to be held in Detroit, June 16, 1937. He invited Dr. James D. Bruce, Dr. C. C. Slemmons, Dr. R. B. Allen, and Dr. H. C. Cummings to attend.

Dr. James D. Bruce, chairman, introduced the suggestion that one or more out-of-state speakers be included each year in the postgraduate teaching. The idea was well received and the matter was left to the discretion of the chairman.

The meeting adjourned.

III. Complying with the unanimous request of the Committee, as embodied in the motion by Dr. P. R. Urmston, Dr. James D. Bruce attended the meeting on postgraduate education in medicine in Atlantic City, held on June 10, 1937. His report at the meeting of the Executive Committee of the Council of the Michigan State Medical Society in Detroit on June 16, 1937, follows:

At the Atlantic City meeting on postgraduate education, Dr. Frank W. Ober and Dr. Leroy Parkins of Boston were elected temporary chairman and secretary, respectively. Representatives from 23 to 25 states were present, all extremely interested in the development of postgraduate education in medicine. While each state has its own peculiar problems, all have many things in common, and certain programs now in progress might be readily adjusted to requirements in practically every state represented.

It was very generally agreed that the association of medical schools, societies, hospitals, et cetera, which has been so satisfactory with us, was a desirable point from which to start. The group voted to organize permanently. Dr. Bruce was elected permanent chairman and Dr. Parkins secretary. It was ruled that two representatives be sent to the American Medical Association and that they suggest to the Association that it give consideration to the problem of postgraduate education. A committee on postgraduate education within the Council on Medical Education was thought an appropriate first step. If the American Medical Association did not wish to undertake this, then as an alternative we might meet unofficially to exchange experiences, as a clearing house of information. This plan of procedure was accepted by the group, and Dr. Ober and Dr. Parkins were delegated to present the matter to the American Medical Association.

* * *

In considering the action of the Advisory Committee on the syllabus of lectures, it is the opinion of the chairman, inasmuch as we presented the copies last year to all in attendance and this year promised volumes only to those who attended 50 per cent or more of the lectures, that we should offer the volume at cost to those who attended less than 50 per cent of the presentations. The cost of the volume is about one dollar a copy. In discussing the matter of subsidizing this publication with Dr. Stuart Pritchard, General Director of the W. K. Kellogg Foundation (last year the Kellogg Foundation subscribed \$600, and this was supplemented by \$200 from University funds), he suggested that the amount necessary to pay for the volume be taken from the balance of last year in the Joint Committee on Health Education fund, to which the Kellogg Foundation had contributed. Since Dr. Pritchard made this suggestion, the chairman believes that we might properly use \$500 of this fund for this purpose. This will cover approximately the cost of the publication of the volume for those attending 50 per cent or more of the lectures. It is suggested

that we order 600 more volumes and send them, with bill attached, to those attending less than 50 per cent of the presentations.

Respectfully submitted,

J. D. BRUCE, M.D., *Chairman*
 R. B. ALLEN, M.D.
 A. P. BIDDLE, M.D.
 C. T. EKELUND, M.D.
 L. E. HOLLY, M.D.
 GEO. A. KAMPERMAN, M.D.
 G. C. PENBERTHY, M.D.
 R. H. PINO, M.D.
 *J. H. POWERS, M.D.
 C. C. SLEMONS, M.D.
 R. R. SMITH, M.D.
 T. G. YEOMANS, M.D.
 H. H. CUMMINGS, M.D., *Acting Secretary*

SUPPLEMENTAL REPORT OF COMMITTEE ON POSTGRADUATE MEDICAL EDUCATION

The objectives towards which the Michigan program for professional education in the health sciences and for public health education are directed may, at this time, be summarized as follows:

First, a reorganization of the various health science units within the University to make more effective our undergraduate professional teaching and to foster research in the allied health faculties; second, a program of postgraduate education in all health fields designed to supplement undergraduate teaching to keep the professions in touch with advancing sciences; and third, the dissemination of useful health knowledge, together with information concerning the various agencies and how they may be most effectively utilized by the people. In this program it will be noted that no new agencies have been created; simply that those already operating have been brought into greater usefulness.

The activities within these fields are now well under way.

We must realize, however, that modifications and changes will be found necessary from time to time if the obligation we have assumed to supply an adequate health service to all our people is to be met.

In the first commitment of this program, while the profession may aid greatly, the principal burden must be carried by our educational institutions. In the second and third, the responsibility, while still mutual, should fall most heavily for initiative and support upon the professions and organizations operating in the field of social welfare with which this program may successfully integrate. The experience of the past few years has clearly shown that if this program is to continue without interruption, ways and means must be developed to insure continuous financial support. This is particularly true in the operation of the second and the last items. With this in view, I am submitting for consideration the setting up of an endowment fund for professional and lay education with \$500,000 as an objective. This may seem a large amount, but we should be spending a sum equivalent to the income on this amount within the next five years if our present rate of progress is to be maintained. This subject has been discussed from time to time in the past, but no definite effort put forth. It seems that we have now a professional and social program sufficiently concrete to justify an appeal for substantial assistance from those interested in social welfare.

Respectfully submitted,
 JAMES D. BRUCE, M.D., *Chairman*

*Deceased.

ANNUAL REPORT OF THE PUBLIC RELATIONS COMMITTEE, M.S.M.S.

The Public Relations Committee herewith submits its second annual report to the House of Delegates. During the past year, this committee's activities have been largely limited to organizational work in the component county societies and the continued integration of the many fine programs and projects emanating from the other standing and special committees of the State Society.

The major activity of the Michigan State Medical Society during the past year was obviously that of legislation. By action of the Executive Committee, the publicity and integration of the plans of the Legislative Committee were considered an emergency, and as such were most efficiently handled through the agencies of that committee. This arrangement made it possible for the Public Relations Committee to devote its energies to the organizational and other committee work of the Society.

Four meetings were held during the year, at which time all activities of the Michigan State Medical Society were reviewed. A list of the society projects and programs was made available for the members of the committee. Councilor districts were assigned to the committee members to the end that each county society might be contacted during the year.

The following activities were given especial attention by the committee:

1. State Society Night meetings.
2. A Speakers' Bureau, furnishing speakers for
 - (a) County Society meetings
 - (b) Lay organizations
3. Development of Woman's Auxiliary
4. Integration of the following programs:
 - (a) Cancer campaign
 - (b) Mental Hygiene
 - (c) Maternal Health and Child Hygiene
 - (d) Radio programs
 - (e) Venereal disease control
 - (f) Stimulation of Ethics Committee organization
 - (g) Preventive Medicine (County Health, Tuberculosis)
 - (h) Economic considerations, especially post-payment plan for county societies
 - (i) Sex Hygiene in schools
5. Membership increase
6. Filter system
7. Distribution of brochures on Evils of Socialized Medicine, and consideration of revision of this booklet
8. Stimulation of county societies to better local organization by regularity of meetings and closer coöperation between local societies and the Michigan State Medical Society.
9. The Annual Session—its scientific program and exhibitors
10. JOURNAL advertisers
11. Medical Supplements in newspapers

Through the plan of combining the duties of the Chairmanship of the Public Relations Committee with that of the Secretary, much of the detail work of the committee was handled by the Executive and Secretary's offices.

As a result of the committee's activities and observations during the year, the following specific recommendations are made:

First: That continued attention be given to better component county organization by

- (a) Official visits by officers and committeemen of the M.S.M.S. semi-annually, or anytime

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at the request of the County Society; also "State Society Night" meetings.

- (b) Special missionary work among the few definitely inactive county societies.

Second: That a sustained effort be made to bring all eligible non-members throughout the state into the medical society, by joint effort of the county and state society.

Third: Development of a more elaborate speakers' bureau for

- (a) County Society meetings
- (b) Lay organizations

Fourth: That assistance be given to the establishment of a "Michigan Health League."

Fifth: That stress be placed upon the general program of education of

- (a) Undergraduate
- (b) Graduate
- (c) The public
- (d) The physician to his responsibilities

Sixth: That each committee's plans and projects of the year be made the object of special integration, to the end that the medical profession is alive to and trained in the details of presenting a united front to all interests not purporting to maintain the traditions of medicine, but at all times having in mind the welfare of the public health and that of the practitioner of medicine.

Respectfully submitted,

L. FERNALD FOSTER, M.D., *Chairman*
W. H. ALEXANDER, M.D.
F. T. ANDREWS, M.D.
C. R. DENGLE, M.D.
L. E. HOLLY, M.D.
F. B. MINER, M.D.
HAROLD MORRIS, M.D.
W. S. REVENO, M.D.
A. G. SHEETS, M.D.
A. V. WENGER, M.D.

ANNUAL REPORT OF THE ETHICS COMMITTEE

This committee started the year under the very capable chairmanship of Dr. F. B. Burke of Detroit whose untimely death early in 1937 made it necessary for President Perry to appoint a successor and he conferred this honor upon me. I received a letter on February 18, 1937, verifying the appointment and re-naming the other members of the committee: Dr. Earl G. Krieg, Detroit; Dr. Harold A. Miller, Lansing; Dr. F. E. Reeder, Flint, and Dr. W. J. Butler, Grand Rapids. These men were contacted immediately and agreed to continue as members of the committee.

Your committee is happy to report that only one direct matter involving an alleged violation of ethics came up for consideration after the appointment of the new chairman. It was possible to bring this matter to what seemed to be a satisfactory conclusion to all of the parties concerned purely by correspondence.

There were a number of indirect and unwritten accusations brought against some of the cultists which the committee thought best to ignore. It is a pleasure to report that inquiry here and there about the state reveals that the members of the Michigan State Medical Society are "hewing rather close to the line." We stand ready to investigate any violation of ethics when the *facts of the case are presented in writing* to this committee.

All your committee needs is a definite and written complaint containing the facts, and it will be of service.

Respectfully submitted,

HORACE WRAY PORTER, M.D., *Chairman*
EARL G. KRIEG, M.D.
H. A. MILLER, M.D.
F. E. REEDER, M.D.
W. J. BUTLER, M.D.

ANNUAL REPORT OF THE COMMITTEE ON MATERNAL HEALTH

We hereby submit a report of the activities of the Maternal Health Committee which was appointed by President Perry for the current year.

The first accomplishment was the completion of the obstetric survey commenced a year ago with the object of evaluating obstetric practice in Michigan at the present time. While there was lethargy and even opposition on the part of some of the physicians who received the survey blanks, which were prepared by the Committee probably in too much detail, yet the general response was very gratifying. Over 20,000 blanks were submitted to all physicians and other individuals doing obstetrical work in the State, and over 10,000 blanks were answered and returned.

A statistical study of these questionnaires is being made at the present writing through the United States Public Health Service. While no detailed report is available as yet, the Committee has had a partial report which enables it to predict that the information which will be forthcoming from the completed study will be most valuable to all physicians who are interested in elevating the standards of obstetrics in Michigan and elsewhere.

The Committee is very desirous that, when an analysis of this survey is completed, a printed booklet embodying its most important and practical features be published and presented to all physicians in Michigan who are interested in improving the practice of obstetrics.

The Committee has had several meetings. One of the most important was with the dean and other administrative officers of the medical department of the University of Michigan concerning the inadequacy of clinical obstetrical material at the University Hospital. At this meeting our Committee was assured that the University would be most willing to cooperate with any plan agreeable to the Michigan State Medical Society. It is hoped that in the immediate future the State Medical Society will suggest to the University remedial measures to correct the scarcity of clinical obstetrical material at the University Hospital.

The Committee recommends that efforts be continued to have the obstetrical clinical material satisfactorily increased at the University Hospital.

The Committee, realizing that maternal health work throughout the State could be expedited by having a maternal health committee appointed in every county medical society, contacted the president of each county society and is happy to report that a maternal health committee has been appointed in nearly every county society in the State.

In an effort to increase public health education, a moving picture entitled "The Care of the Expectant Mother" (the making of which was supervised by a member of the Committee) was released. This film has been presented before several lay audiences and medical groups and has been most favorably received.

One of the members of the Committee prepared two excellent radio addresses on maternal health

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subjects which have been broadcast. The Joint Committee on Health Education arranged for these broadcasts.

Realizing the necessity of bringing maternal health matters to the attention of the public, the Committee contacted the Michigan Federation of Women's Clubs and offered to furnish them with competent speakers to discuss various problems of maternal health.

The Committee further recommends a continuation of public education by physicians on all matters pertaining to maternal health.

The Committee has had at all times the co-operation of the President, Executive Committee and President-Elect of the Michigan State Medical Society; the State Commissioner of Health; the University of Michigan; and the United States Public Health Service—for which it is sincerely grateful.

Respectfully submitted,

ALEXANDER M. CAMPBELL, M.D., *Chairman*
HAROLD A. FURLONG, M.D.
NORMAN F. MILLER, M.D.
WARD F. SEELEY, M.D.
HAROLD W. WILEY, M.D.

ANNUAL REPORT OF CONTACT COMMITTEE TO GOVERNMENTAL AGENCIES

During the past year, your committee held one meeting, on February 14, 1937, in Lansing. During the balance of the year, the work of the committee was done by correspondence between the members and by individual contacts made by members with various governmental officials, agencies, and allied groups.

The one important matter before the committee was the medical phases of the welfare and relief bills. The five points which the medical profession wished to have inserted in the welfare and relief bills were studied, amended, and approved by this committee, and referred to the Legislative Committee for further action. It is gratifying that the salient points, as recommended, were placed as amendments in Senate Bill No. 111 which was subsequently enacted into law by the 1937 Legislature. Good contact work during the past two years has placed the Michigan State Medical Society in an enviable position in Lansing. This committee recommends a continuation and increase in all such relations, and the development of a Michigan Health League in which the allied professions and laymen interested in health protection may work in unison.

Respectfully submitted,

H. H. CUMMINGS, M.D., *Chairman*
L. G. CHRISTIAN, M.D.
HENRY COOK, M.D.
L. F. FOSTER, M.D.
T. K. GRUBER, M.D.
S. W. INSLEY, M.D.
C. R. KEYPORT, M.D.
JOHN McCANN, M.D.
J. M. WHALEN, M.D.

ANNUAL REPORT OF THE MENTAL HYGIENE COMMITTEE

This committee has coöperated in an official capacity throughout the year with various committees in the state dealing with problems in the field of Mental Hygiene. The Parent-Teacher Organizations, Michigan Committee on Prevention of Delinquency, The Michigan Society for Mental Hygiene,

Dr. D. P. Phillips of the Michigan Parole Board, and The Joint Committee on Health Education are a few of the agencies that have worked with this committee from the Medical Society. Through the offices of The Joint Committee on Health Education, two state-wide radio broadcasts were delivered. Active part has been taken by members of this committee in the radio broadcasts by the *Detroit News* under the title "Causes of Crime."

Your committee has learned that the public is very eager for information on the subject of Mental Hygiene and its implications. Your committee feels that, as an organization, the Medical Society is not assuming the leadership in this movement that it should.

The committee has two recommendations to make:

1st—That County Societies be made more aware of the services available through this committee.

2nd—That more time be allocated in the Post-graduate meetings for training of the profession in the subjects of Psychiatry and Mental Hygiene.

Respectfully submitted,

HENRY A. LUCE, M.D., *Chairman*
E. H. CAMPBELL, M.D.
MARTIN H. HOFFMANN, M.D.
GEORGE F. INCH, M.D.
THEOPHILE RAPHAEL, M.D.

ANNUAL REPORT OF ADVISORY COMMITTEE TO THE WOMAN'S AUXILIARY

The Advisory Committee to the Woman's Auxiliary has held itself in readiness to act in its designated capacity whenever called upon. A small number of letters of inquiry were answered as received. The chairman of the committee helped to organize an auxiliary in her home county.

However, any one who has direct knowledge of auxiliary activities or reads of them in "Auxiliary Notes," must realize that the splendid organization of the Auxiliary, its tremendous variety of activities, and the admirable spirit and energy of its officers and members practically preclude the need of advice from any committee.

The enlargement upon the work of the auxiliary as regards cancer prevention, *Hygeia* circulation, public relational activities, various types of welfare work, help in securing passage of the Basic Science Bill, promotion of sociability and fellowship, etc., etc., could only appear to be an effort on the part of the committee to secure for itself some of the great glory of the Auxiliary. The Auxiliary should have all the glory of the recital of its activities.

The only claim of the advisory committee, and a very humble one, is that it stood ready to serve.

Respectfully submitted,

FLORENCE AMES, M.D., *Chairman*
*JOHN CHESTER, M.D.
BERTHA SELMON, M.D.
G. H. YEO, M.D.

ANNUAL REPORT OF THE RADIO COMMITTEE

It will be recalled that last year the Radio Committee recommended the initiation of a program consisting of a series of eighteen weekly broadcasts over a number of state operated broadcasting stations.

Several committees of the State Medical Society, the State Dental Society, and the American Academy

*Deceased.

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of Pediatrics coöperated by assuming the responsibility for selecting and preparing talks on the number of subjects assigned them. The titles of the talks presented and the group responsible for each are listed below:

Subject	Committee
1. "Your Health"	Joint Committee on Health Education
2. "Modern Weapons in the Fight Against Tuberculosis"	Preventive Medicine
3. "Mental Hygiene"	Mental Hygiene
4. "Early Cancer is Curable"	Cancer
5. "Parents, Dentists and Children's Teeth"	Michigan State Dental Society
6. "What is the Meaning of Prenatal Care?"	Maternal Health
7. "Safety Through Vaccines and Serums"	American Academy of Pediatrics
8. "Local Health Department Program"	Local Radio Committee Chairmen
9. "Our Next Great Plague To Go" or "Plastic Surgery"	Preventive Medicine
10. "Dentistry in the Field of Public Health"	Michigan State Dental Society
11. "Child-Bed Fever"	Maternal Health
12. "Common Colds"	American Academy of Pediatrics
13. "Better Control of the Cancer Problem"	Cancer
14. "The Pink Tooth Brush"	Michigan State Dental Society
15. "Care of the Mentally Ill in Michigan"	Mental Hygiene
16. "Appendicitis"	C. D. Brooks, M.D.
17. "Basic Science Bill"	Wm. J. Burns, Executive Secretary, M.S.M.S.
18. "A Messenger of Health"	Preventive Medicine

*Some stations objected to the talk on syphilis, and "Plastic Surgery" was substituted.

The Joint Committee on Health Education through its Field Secretary, Dr. Clare Gates, assumed the responsibility of interviewing each participating County Medical Society and local radio station. The participating County Medical Societies and radio stations are listed below:

Medical Society	City	Radio Station
1. Bay County	Bay City	WBCM
2. Calhoun County	Battle Creek	WELL
3. Genesee County	Flint	WFDF
4. Jackson County	Jackson	WIBM
5. Kalamazoo County	Kalamazoo	WKZO
6. Kent County	Grand Rapids	WASH-WOOD
7. Muskegon County	Muskegon	WKBZ
8. Wayne County	Detroit	GKLW
9. Marquette County	Marquette	WBEO

Two County Medical Societies and local radio stations did not participate. These were:

1. Ingham County Medical Society, Lansing radio station WJIM. The radio station and the society were not successful in arranging a satisfactory working agreement.
2. Gogebic County Medical Society, Ironwood radio station WJMS. The radio station was anxious to coöperate. The County Medical Society, however, apparently was not able to institute the program this year.

The Committee has at the present time about 700 radio scripts in its library. These talks are cataloged according to length of the talk and subject material. County Medical Societies may borrow these scripts upon request to the Executive Secretary of the Michigan State Medical Society, 2020 Olds Tower, Lansing, Michigan.

Comments on the Program

Coöperating County Medical Societies have unanimously approved the manner in which the programs were conducted and will coöperate another year. Several commented that newspaper pub-

licity was needed. Unfriendliness exists between local radio stations and newspapers outside of Wayne County which makes needed newspaper publicity difficult to obtain.

The radio stations donated time and facilities valued at \$3,264.00, based on regular commercial rates. This contribution together with their urgent requests for the continuation of the program indicates its popularity and value.

The Joint Committee has offered to continue its coöperation, which makes this program possible. It is planned to conduct a program next year consisting of twenty-four weekly broadcasts which is an increase of six over 1936-1937. For the next series of programs we are trying a new plan in obtaining the scripts. Instead of asking different committees of the State Medical Society to prepare the papers, specialists in the different fields will be asked to prepare them on subjects chosen by the Radio Committee. We welcome constructive criticisms and suggestions as to policy.

The Committee takes this opportunity of expressing its appreciation to the many men throughout the state who gave so freely of their time and services.

Respectfully submitted,

FRED H. COLE, M.D., *Chairman*
ROBERT BREAKEY, M.D.
F. M. DOYLE, M.D.
C. F. SNAPP, M.D.

ANNUAL REPORT OF LIAISON COMMITTEE WITH HOSPITAL ASSOCIATION

Your committee held two meetings during the past year, one on December 4, 1936, at Harper Hospital, and one on January 8, 1937, in the Wayne County Medical Society Building, Detroit.

The committee limited its formal work this year to the study on action on Fee Schedules A, B, C, D, covering medical care of afflicted and crippled children. It joined with the Committee Studying Schedules A, B, C, D, and with the MSMS-MHA-MAR Committee. This committee still feels that the fee for roentgenologists should be included in Schedules A and C, on the same basis as medical and surgical fees, for both diagnostic and hospital cases.

Your committee respectfully recommends:

That at frequent intervals a committee of the Michigan State Medical Society contact a committee of the Michigan Hospital Association for a discussion and recommendations re solution of such problems as emergency service by residents and internes; principle of post-payment plan for hospital care of the borderline group; anesthesia administration; definition of the responsibilities to the patient by the doctor and by the hospital; the alleged practice of medicine by hospitals or the unauthorized practice of medicine by institutions and organizations.

That one committee be formed to take over similar work which is now being assigned to four committees, i.e.: the Contact Committee with Hospital Association, the Committee Studying Fee Schedules A, B, C, D, the MSMS-MHA-MAR Committee, and the Advisory Committee on Group Hospitalization.

Respectfully submitted,

T. K. GRUBER, M.D., *Chairman*
H. S. COLLIS, M.D.
W. C. ELLET, M.D.
DEAN HART, M.D.
E. R. WITWER, M.D.

ANNUAL REPORT OF THE LIAISON COMMITTEE WITH DENTISTS, NURSES AND PHARMACISTS

The Liaison Committee with Dentists, Nurses and Pharmacists, of the Michigan State Medical Society held one meeting during the year 1936-1937. This was held in Pontiac, on February 5, 1937, and was attended by the Chairman and Dr. Merle C. Pierson of Detroit. A telegram was received from Dr. E. F. Sladek, stating that a serious case prevented attendance, and a letter from the office of Dr. C. S. Gorsline of Battle Creek stated that he was on vacation in Florida. Dr. Sladek sent his approval of the formation of an Allied Health Council in Michigan.

The formation of an Allied Health Council was discussed by Dr. Tuck and Dr. Pierson and it was decided that the State Society should encourage the formation of such a Council. This decision had the approval, by telegram, of Dr. Sladek as well. The recommendations of this committee were presented to the Executive Committee at its Mid-Winter Meeting held in Detroit. The Executive Committee referred this matter to the Committee on Medical Economics for study and report back to the Executive Committee. The Executive Committee approved the formation of an Allied Health Council at its meeting held at Owosso, February 18, 1937.

Your chairman addressed letters to the president and secretary of the Michigan State Dental Society, the Michigan State Nurses Association, the Michigan State Pharmaceutical Association and the Michigan Funeral Directors Association, asking whether the members of their state organizations wished to join us in the formation of an Allied Health Council. A bulletin was prepared and mailed to each group, explaining the purposes and aims of such a council. All reported that they were in accord with this proposal.

Your Chairman then requested the President of each state group to send him the names and addresses of three members who would serve as representatives of their group on the Allied Health Council. Replies have been received from all these associations.

Now that each state groups has appointed its three representatives, a meeting will be called to perfect an organization, elect officers, draw up a constitution, and by-laws. A full report will then be presented to the Executive Committee of the Council, Michigan State Medical Society.

Your chairman feels that the formation of an Allied Health Council in the State of Michigan should be of much benefit to every professional man and woman in the state. United action by such an organization in legislative matters alone should justify its existence and we are looking forward to a time when all good health legislation will be approved and supported by each professional group, collectively, and all legislative proposals inimical to the health of the citizens of this state shall be opposed by the professional people of this state.

If the formation of an Allied Health Council proves to be of benefit to the citizens of Michigan and to the various professional people responsible for conserving the health of our citizens we shall feel that our small effort in promoting such an organization is well worthwhile.

We wish to express our appreciation to the officers of the Michigan State Medical Society for

their broad understanding and prompt approval of our efforts.

Respectfully submitted,

R. G. TUCK, M.D., *Chairman*
C. S. GORSLINE, M.D.
M. C. PIERSON, M.D.
E. F. SLADEK, M.D.

JOINT REPORT OF THE COMMITTEE STUDYING SCHEDULES A, B, C, D, AND OF THE MSMS-MHA-MAR COMMITTEE

Your Committee to Study Schedules A, B, C, D, completed its major work last year by recommending certain revisions in the schedules covering the medical care of afflicted and crippled children. During the last twelve months, however, the committee has been called upon from time to time to render opinions regarding individual items in the Fee Schedule, and also to discuss these matters with the Auditor General and the Crippled Children Commission in Lansing.

The MSMS-MHA-MAR Committee was created during the past year for the purpose of solving the problem of the roentgenologists' fees in the care of crippled and afflicted children. The committee was composed of two representatives from the Michigan State Medical Society, two representatives from the Michigan Hospital Association, and one representative from the Michigan Association of Roentgenologists. This committee had several meetings, and submitted to the Auditor General and to the Crippled Children Commission three proposals which had previously been reported to the Executive Committee of The Council of the Michigan State Medical Society. Members of this committee also visited Lansing on several occasions, to confer with the Auditor General and the Crippled Children Commission.

Under the 1937 Legislative amendments to the Crippled and Afflicted Child Acts, the Fee Schedules must be revised semiannually, on September 1 and March 1. At the present time, your committees are working with the Crippled Children Commission and the Auditor General on the schedules to be published as of September 1, 1937. The main point of issue, unsettled as of this date (August 6, 1937), is the matter of placing the roentgenological fee schedule in Schedules A and C, along with those of other independent practitioners, and not in Schedules B and D—the Hospital Rate Schedule, as well as the question of the amount of the discount to be allowed to the state by radiologists.

A supplemental report, with progress to date, will be submitted to the House of Delegates at its September, 1937, meeting in Grand Rapids.

Respectfully submitted,

MSMS-MHA-MAR COMMITTEE

E. R. WITWER, M.D., *Chairman*
H. S. COLLISI, M.D.
J. STUART HAMILTON
F. H. PURCELL, M.D.
WM. QUENNEL, M.D.

COMMITTEE TO STUDY FEE SCHEDULES A, B, C, D

GROVER C. PENBERTHY, M.D., *Chairman*
L. G. CHRISTIAN, M.D.
HENRY COOK, M.D.
C. T. EKKELUND, M.D.
C. R. KEYPORT, M.D.
E. R. WITWER, M.D.
F. H. PURCELL, M.D.

SUMMARY OF PROCEEDINGS OF THE HOUSE OF DELEGATES—1936

The Seventy-First Annual Meeting of the House of Delegates of the Michigan State Medical Society was held at Detroit, September 21-22, 1936.

The House of Delegates:

1. Accepted and adopted with thanks the reports of the following committees: (751 to 758*)

Legislative Committee

Joint Committee on Health Education

Committee on Economics

(a) Sub-committee on Industrial Medicine.

(b) Sub-committee on Post-graduate courses for general practitioners.

(c) Sub-committee on Insurance Examinations.

Cancer Committee

Preventive Medicine Committee

Post-graduate Medical Education

Committee on Public Relations

Advisory Committee, Woman's Auxiliary

Radio Committee

Mental Hygiene Committee

Liaison Committee with Hospital Association

Liaison Committee with Bar Association

Medico-Legal Study Committee (a committee of the House of Delegates)

Iodized Salt Committee (a committee of the Section on Pediatrics)

2. The following committee reports were received: Maternal Health Committee
Contact Committee to Governmental Agencies

3. The Following Committee Report was not accepted:

Sub-committee on Relief Medicine of the Committee on Economics

4. Amended the By-Laws (Chapter 9, Section 10) so that each County Medical Society appoints or elects a Committee on Legislation and Public Relations (instead of "Public Policy" 758*).

5. Amended the By-Laws (Chapter 6, Section 1 and Section 8) to create a standing committee on Post-graduate Medical Education (758*).

6. Amended the By-Laws (Chapter 4, Section 4) to outline the duties of the secretary and the executive secretary (758-759-760*).

7. Amended the By-Laws (Chapter 6, Section 1 and Section 9) to create a standing committee on Public Relations (760*).

8. Amended the By-Laws (Chapter 6, Section 1 and Section 10) to create a standing committee on Ethics (760*).

9. Proposed an amendment to the Constitution (Article Five) to make the Speaker of the House of Delegates a member of The Council and of the Executive Committee of The Council with power to vote. (760*).

This proposal is on the agenda of the House of Delegates at its 1937 meeting:

"That Article V. of the Constitution be amended to insert in line 8, following the word 'Secretary': 'The Speaker of the House of Delegates.' The sentence would then read, 'It shall consist of the Councilors, the President, the President-Elect, the Secretary, the Speaker of

the House of Delegates, and the Treasurer of the Society.'

"An additional line should be added to the section reading, 'The Speaker of the House of Delegates shall be a member of the Council and of its Executive Committee with power to vote.'"

10. Elected to Emeritus Membership in the Michigan State Medical Society, Doctors Alois Thuner, Angus McLean, A. N. Collins, all of Detroit; F. A. Hargrave of Palo; G. M. Braden of Scotts; J. W. Hawkey of Bloomington; J. W. Leininger and A. O. Boulton of Gladwin (761*).

11. Adopted a resolution concerning integration of all society activities through the executive office in Lansing. All committees of the state society are to carry on official business through the executive office, through the secretary or executive secretary, and all committee meetings are to be covered by the secretary or executive secretary, whenever possible (761*).

12. Adopted resolution recommending uniform program for the teaching of social hygiene in public schools to be integrated through the Public Relations Committee (761*).

13. Adopted resolution concerning standards for interne training for hospitals, and referred same to Michigan State Medical Society Delegates to the American Medical Association for appropriate action (761*).

14. Adopted a resolution re the medical examiner system, with this comment:

"Your committee feels that as a medical society we should merely function in recommending this as a civic organization, and should have nothing to do with any legislative activities in attempting to put it across." (761*).

15. Adopted a resolution recommending that the Special Contact Committee to Governmental Agencies confer with the Crippled Children Commission in an attempt to clarify what type of orthopedic surgery occurring in indigent children can be promptly cared for by the general surgeon, and that this committee report to the Executive Committee of The Council (761*).

16. Approved the following report relative to Red Cross First Aid stations along trunk automobile routes:

"Such stations should be established in outlying districts where immediate medical aid is not available, but not in close proximity to centers of population where such emergency can properly be cared for in regular channels. The various county medical societies should have a definite voice in determining whether or not they desire such a set-up, according to their own discretion; and shall have a definite voice in determining what points are appropriate for their establishment. It is distinctly understood that services rendered in such stations be in the nature of first-aid only." (749-750*).

17. Adopted a resolution on the death of Dr. Carl F. Moll, past president of the Michigan State Medical Society (750*).

*Numbers refer to pages in the November, 1936, issue of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

18. Selected Grand Rapids as the place for the 1937 Annual Meeting (766*).

19. Laid on the table: proposed amendments to the Constitution, as recommended by the 1935 House of Delegates—Article 8, Section 2, to provide for the election of the secretary by the House of Delegates instead of by The Council; Article 9, Section 3, to provide for the delivery of the invested funds of the society to the treasurer by the vice-secretary; Article 9, Section 4, to substitute vice-secretary for secretary, and to fix the amount of the bond (767-768*).

These proposals are on the agenda of the House of Delegates at its 1937 meeting:

Article 8—Officers:

Section 2. "The president, the president-elect, the councilors, the speaker, the vice-speaker, and the secretary shall be elected annually by the House of Delegates. The editor and the treasurer shall be elected by The Council at its annual meeting in January of each year. The councilors shall be elected for a term of five years each. These terms to be so divided that no more than four councilors are elected at any annual session. All these officers shall serve until their successors are elected and installed."

Article 9—Funds and Expenses:

Section 3. "The invested funds of the society shall be delivered to the treasurer by the vice-secretary."

Section 4. "The vice-secretary shall collect all annual dues and all moneys owing the society, depositing them in an approved depository and dispersed by him upon order of The Council. The Council shall cause an annual audit to be

made of the funds of the society by certified public accountants, and shall require the treasurer and the vice-secretary to be bonded for \$25,000."

20. Elections:

- (a) Elected Dr. Henry Cook of Flint as president-elect (766*).
- (b) Relected Dr. Frank E. Reeder of Flint as Speaker of the House of Delegates (767*).
- (c) Relected Dr. Philip A. Riley of Jackson as vice-speaker of the House of Delegates (767*).
- (d) Elected as Councilors: (762-763*)
Dr. Henry R. Carstens, Detroit (incumbent), First District
Dr. F. T. Andrews, Kalamazoo, Fourth District
Dr. Vernor M. Moore, Grand Rapids (incumbent), Fifth District
Dr. I. W. Greene, Owosso, Sixth District
Dr. Roy H. Holmes, Muskegon, Eleventh District.
- (e) Elected as delegates to the American Medical Association: (763-764-765*)
Dr. H. A. Luce, Detroit (incumbent)
Dr. T. K. Gruber, Eloise
Dr. J. D. Brook, Grandville (incumbent)
Dr. C. E. Keyport, Grayling (incumbent)
- (f) Elected as Alternate Delegates to the American Medical Association: (765-766*)
Dr. T. K. DeGurse, Marine City (incumbent)
Dr. C. S. Gorsline, Battle Creek
Dr. R. H. Denham, Grand Rapids (incumbent)

*Numbers refer to pages in the November, 1936, issue of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

Secretaries' Conference

At Annual Convention, M. S. M. S.

PANTLIND HOTEL

Tuesday, September 28, 1937

5:30 to 8:00 P. M.

DINNER ENTERTAINMENT
INFORMATION SOCIABILITY

The Fifty-four County Society Secretaries
Are Invited - And Expected!

DEPARTMENT OF SOCIETY ACTIVITY

L. FERNALD FOSTER, M.D., Secretary

THE ANNUAL SESSION

Each year your Council and Officers arrange, with much detail, an Annual Session. Someone may ask, "What is the value of the annual session?" A thoughtful consideration of this event elicits many values to the physicians of Michigan, values that enhance the scientific phase of medical practice and values that have to do with the social aspects of sickness and the parent organization of medicine in Michigan.

All Under One Roof

The choice of a host city has much to do with a successful annual meeting. This year Grand Rapids was chosen because of its unique facilities for handling a convention which has assumed such proportions that in 1936 over 1,600 physicians attended its sessions. The civic auditorium of Grand Rapids has made it possible to conduct this big assembly under one roof.

Seven General Assemblies

The first session of the House of Delegates is called for Monday morning, September 27. This body of over 100 delegates is the governing body of the State Society. It adopted rules and regulations for its own government and that of the Society. It considers the "business" of the Society and develops its policies. Its value is obvious—it is an integral part of the annual session.

The Scientific Program of the Michigan State Medical Society, in annual session, has always been an outstanding one. This year it may be even more so from a practical standpoint because all of the sessions are of a general character. There will be no overlapping programs. Each visiting physician may hear each essayist and thereby acquire in the aggregate program an intensive post-graduate course. Twenty of the twenty-

nine speakers at the seven general assemblies are men from outside of Michigan. The speakers have been chosen from every field and specialty of medicine—men with a real message. Does one need ask, "What value?"

Entertainment and Exhibits

Seventy-two technical exhibits will present to Michigan physicians the last word in scientific development—the latest advances in medical equipment and supplies. The inspection of these exhibits has been provided for throughout the sessions. To visit each booth and register need not, in any way, interfere with your scientific programs. They are surely of real value.

Fellowship and recreation are always translated in real values. The Medical Golf Tournament, the Presidents' Night, the Alumni and Fraternity gatherings, the sights of a great furniture city—all are combined in a delightful four-day session—your ANNUAL SESSION.

Imposing Array of Events

Scientific advancement in your profession and an alertness to the socio-economic phases of your practice calls you to the annual meeting in Grand Rapids—the call is to the 5,000 physicians of Michigan. Let's answer the call, let's make our reservations now in Grand Rapids, and let's take part in all or part of the imposing array of events—play golf, attend the sessions of your House of Delegates, listen to the many fine scientific papers, visit the Technical Exhibits and register with them, meet your colleagues and when the sessions are adjourned, return home with a feeling that you are a better physician, that you know more about the science and business of medicine, and that you have appreciated the values of the ANNUAL SESSION.

Come to Grand Rapids for the 1937 meeting of the Michigan State Medical Society, September 27, 28, 29, 30.

COUNTY SECRETARIES' CONFERENCE

Your Council has authorized a conference of County Secretaries, to be held Tuesday, September 28, with dinner at 5:30 P. M., at the Pantlind Hotel in conjunction with the annual session of the Michigan State Medical Society in Grand Rapids. A conference at this time is of singular significance. President-elect Cook has announced, as one of his objectives for next year, a greater society organizational activity. If this objective is to be realized, the fifty-four county units must each contribute to such a program.

The County Secretary should be the keyman in his local society and as such is charged with a great deal of the responsibility of organizational effort. A conference of the county secretaries at the time of the annual session is planned to provide the necessary inspiration and enthusiasm to initiate the State Society's policy in each respective County Society.

The conference will provide three or four short inspirational talks combining suggestions which should make for more active county units.

The Councilors and State officers will be present and each Secretary is requested to bring the President-elect or the next year's president of his society.

This meeting is provided at considerable expense and has a very definite purpose. It is an integral part of the State Society's plan for next year and each of the fifty-four County Secretaries is URGED to be present. Your State Society is only the aggregate of its fifty-four component units and its efficiency is wholly contingent upon efficiency of these units.

**Remember—Tuesday, Sept. 28, 5:30 P. M.
Pantlind Hotel — Grand Rapids**

MINUTES OF MEETING OF EXECUTIVE COMMITTEE OF THE COUNCIL,

July 29, 1937

1. *Roll Call.* The meeting was called to order by Dr. P. R. Urmston, Chairman, in the Durant Hotel, Flint, on July 29, 1937, at 3:30 P. M. Those present included Drs. P. R. Urmston, Bay City; I. W. Greene, Owosso; H. R. Carstens, Detroit; T. F. Heavenrich, Port Huron; F. E. Reeder, Flint; A. S. Brunk, Detroit; and Roy H. Holmes, Muskegon. Also present were Dr. Henry E. Perry, President, Newberry; Dr. Henry Cook, Flint; Dr. L. Fernald Foster, Bay City; Dr. R. G. Tuck, Pontiac; Dr.

R. H. Pino, Detroit; and Executive Secretary Wm. J. Burns.

2. *Minutes.* The minutes of the meeting of June 16 were published and mailed to each member of The Council.

3. *Financial Report.* The financial reports for the month of June, and for the first six months of 1937 were presented. The Executive Secretary was instructed to estimate the probable income and expenditures of the Society for the balance of the year. Bills payable for the month were presented and ordered paid on motion of Drs. Carstens-Reeder, and carried.

4. *Annual Meeting.* Secretary Foster outlined the progress on program and details of the Annual Meeting. The question of proper publicity at the annual meeting was discussed, and motion was made by Drs. Carstens-Greene that a committee of five be appointed by the Chair to serve as a Press Committee, with power to act, and to be responsible for all press releases, except those of the House of Delegates, which has its own press committee. Carried unanimously.

5. *Contact Committee with Parole Commission.* Chairman Urmston appointed Dr. A. C. Furstenberg, Ann Arbor, as the fifth member of this Contact Committee, which was approved by the Executive Committee of The Council. The Executive Secretary was instructed to advise Mr. Hilmer Gellein of the Parole Commission regarding the formation of this committee, and to request Dr. P. A. Riley, its Chairman, to proceed, as per the recommendation of the Executive Committee at its meeting of May 13, 1937.

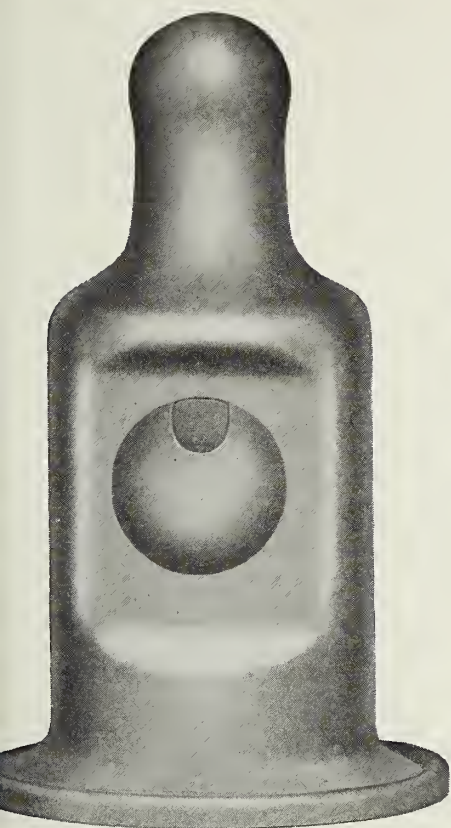
6. *Model Constitution and By-Laws for County Medical Societies.* The Chairman requested all members to review his copy of this Model Constitution and By-Laws, and to be ready to act upon same at the next meeting of The Council.

7. *Obstetric Material at University Hospital.* Report on a meeting with Dr. Furstenberg was given by Secretary Foster. Dr. Furstenberg advised that funds would be available to provide for more obstetrical material in the future. This report was accepted and ordered placed on file.

8. *Syphilis Control Program.* A report was given on the status of the venereal disease control program in Michigan and in the United States. The antenatal physical examination fee problem, as a result of the law recently enacted by the Legislature, was presented, thoroughly discussed, and on motion of Drs. Brunk-Carstens, referred to the Syphilis Control Committee of the MSMS, to study the problem, to make recommendations, and to report back to the Executive Committee. It was recommended that the committee study conditions in other states; it was also recommended that an item regarding this problem be inserted in the Secretary's Letter going to the entire membership.

The Executive Secretary was instructed to write Health Commissioner Slemmons to the effect that the Executive Committee of The Council offer to the State Health Commissioner the services of its Syphilis Control Committee to aid in any matters associated with the venereal disease control program in Michigan, and also connected with the recent pre-natal physical examination law.

9. *Salaries.* President Perry spoke of the salaries for the personnel in the Executive Office of the MSMS. This subject was thoroughly discussed, and Drs. Carstens-Heavenrich moved that Mr. Lynn Leet and Miss Winifred Shepline be paid at the rate of \$125 per month, effective July 1, 1937. Carried unanimously.



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SOCIETY ACTIVITY

Motion of Drs. Carstens-Reeder that Miss Ann Tracy be recompensed at the rate of \$80 per month, effective July 1, 1937. Carried unanimously.

It was understood that a portion of these increases are in lieu of employer-contribution to employees for Social Security purposes, in order that the employees of the Michigan State Medical Society may voluntarily take advantage of the provisions of the Social Security Law, if they so desire.

10. *Medical Program Under Public Assistance Act.* Dr. Tuck presented a plan for medical relief organization, for presentation to the Public Assistance Commission, which was thoroughly discussed by all. A proposal similar to the Ontario Plan was also presented and discussed. Dr. Perry spoke on the advisability of having a physician on the Public Welfare Assistance Commission. Dr. Pino felt that perhaps the Ontario Plan might be presented by the Committee on Economics to the House of Delegates in September.

Dr. Tuck stated that the governmental people are waiting for a plan to be presented by the medical profession. Motion of Drs. Greene-Brunk that the Executive Committee of The Council approve of the plan of medical welfare, as presented by Drs. Pino and Tuck, and that the proper committee be empowered to contact the Commission to take steps to put this plan into effect. Carried unanimously.

The Chair thanked Dr. Pino and Dr. Tuck for their attendance and information.

11. *Fee Schedules A, B, C, D.* Dr. E. R. Witwer spoke of the present situation of Fee Schedules A, B, C, D, a new revision having been approved tentatively by the Crippled Children Commission and the Auditor General in Traverse City on July 21, 1937. Full discussion ended in a motion by Drs. Carstens-Reeder that the Executive Secretary be directed to contact the Auditor General and the Crippled Children Commission regarding the various items in the proposed new Fee Schedule. Carried unanimously.

12. *Delegates' Breakfast.* The matter of a breakfast for Delegates, preceding their first meeting of September 27, 1937, was presented. Motion of Drs. Greene-Brunk that such a breakfast be arranged at the time of the Annual Meeting. Carried unanimously.

13. *August Meeting of The Council.* The invitation of Dr. Frank E. Reeder to hold a meeting of the entire Council at Baldwin, Michigan, was accepted for Wednesday, August 11, 1937.

14. *MSMS Program for Ensuing Year.* President-Elect Cook presented the matter of outlining a program for the year 1937-38. A committee was authorized to map out the program for the ensuing year, and to present same to The Council on August 11. Committee: Drs. Cook, Urmston, Greene, Foster, and Mr. Burns.

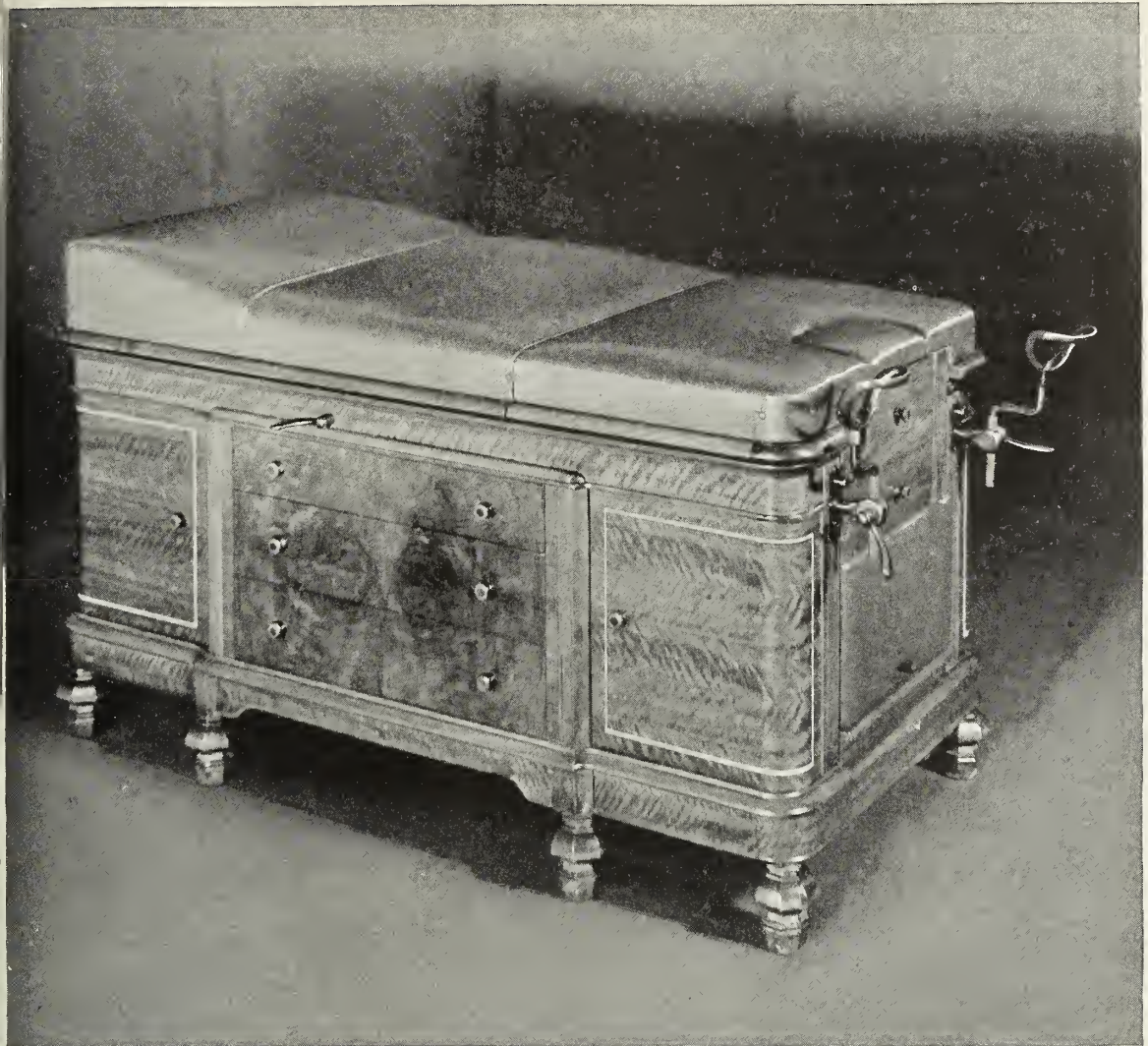
15. *Adjournment.* The meeting was adjourned at 10:50 P. M.

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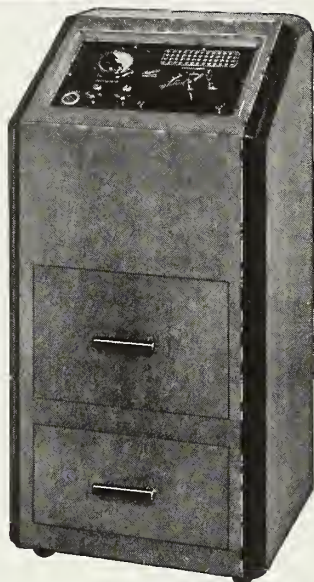
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**MICHIGAN'S DEPARTMENT
OF HEALTH**

**C. C. SLEMONS, M.D., Dr.P.H., Commissioner
LANSING, MICHIGAN**

**UPPER PENINSULA REFRESHER
COURSE IN OBSTETRICS**

All Upper Peninsula physicians have been invited to attend a postgraduate refresher course in obstetrics to be offered at five centers in that area starting the week of October 4. The course has been arranged by the Michigan Department of Health in cooperation with the Michigan State Medical Society, the Department of Postgraduate Medicine of the University of Michigan, and the county and district medical societies.

Sault Ste. Marie, Escanaba, Marquette, Houghton and Ironwood have been selected as instruction centers. Postgraduate lectures in obstetrics will be given one evening each week for four weeks at each of the above centers, starting at Sault Ste. Marie on Monday, October 4. Where time permits, clinical consultations may be arranged with the lecturers the morning following each meeting. Physicians may attend the sessions most conveniently located near them. It is planned to open the series with a dinner meeting at each center.

Dr. H. H. Cummings, assistant director of postgraduate medicine at the University of Michigan, will conduct the course the week of October 4 on the subject of "Care of the Pregnant Woman and Management of Toxemias and Other Complications of Pregnancy."

The following week the lectures will be offered by Dr. Norman R. Kretzschmar, assistant professor of obstetrics and gynecology at the University of Michigan, with a discussion of "The Conduct of Normal Labor."

Dr. H. A. Furlong of Pontiac, member of the Maternal Health Committee of the Michigan State Medical Society, will be the lecturer for the week of October 18. He will discuss "Hemorrhagic Complications of Pregnancy and Labor, including Placenta Previa and Post-Partum Hemorrhage."

"Other Complications of Labor including Prolonged Labor, Difficult Labor, Forceps, Version and Operative Deliveries" will be discussed in the final series of lectures the week of October 25 by Dr. Alexander M. Campbell, chairman of the Maternal Health Committee of the Michigan State Medical Society.

**CHANGES IN LAWS GOVERNING
TUBERCULOSIS**

Three acts of the legislature in its 1937 session brought about important changes in the laws governing tuberculosis. The bills as presented were the result of careful study of a committee representing the Michigan Sanatorium Association, Michigan Tuberculosis Association and the Michigan Department of Health and were passed essentially in their original form. The laws amended were Acts 314, P.A. 1927 which is the general tuberculosis law, Act 177, P.A. 1925 which applies to county sanatoriums and Act 254, P.A. 1905 which applies to the State Sanatoriums.

The changes have eliminated conflict and inconsistencies that existed regarding procedures for hospitalization. There is now but one agency responsible to the county for arrangements regarding treatment, isolation and hospitalization at public ex-

pense and that is the local health department or health officer. The status of indigency is no longer a prerequisite for treatment at public expense. Therefore, there will be no need of financial investigations which in the past have often delayed hospitalization to the great detriment of the patient.

The state subsidy has been increased from 75 cents to \$1.50 per day. Thus, the state as a whole assumes about one half of the expense for the care of tuberculosis cases. This should materially lighten the burden of those counties having a high case load but whose financial resources are small.

Another provision in the new law concerns the so-called incorrigible case. Those individuals who are spreaders of infection but who are unwilling to take proper treatment or to maintain isolation for the protection of their families and the public may now be committed by the county probate court to a tuberculosis hospital. The law amply provides for continuous isolation of a person so committed until he is no longer in a communicable state.

Controversies over residence and which county is responsible for the care of a given patient have frequently delayed and at times prevented a patient from receiving prompt or proper treatment. The new law provides for immediate care by the county where the patient is found pending a decision of the director of the State Welfare Department as to which county is actually responsible.

There is no change, of course, in regard to the relationship of private patient and physician, the only requirement being that the case be reported to the health department within 24 hours of the establishment of the diagnosis. However, when a patient must receive treatment at public expense a physician need only report that fact to the local health department and arrangements for treatment or hospitalization, as recommended by the physician, will be made on orders issued by the health officer.

Copies of the new acts will be sent to the secretaries of each county or district medical society with the recommendation that they be read to the members.

It is the hope of the sponsors of this legislation that simplification of procedures for hospitalization will enable an increasingly higher percentage of minimal cases to receive active treatment. Certainly there is room for improvement when we are confronted with the fact that eighty per cent of the patients hospitalized heretofore have had far advanced disease on entrance.

THE ANTENUPTIAL PHYSICAL EXAMINATION LAW

Because of its far-reaching social affect, the soundness of its fundamental purpose and the unlimited opportunity for the medical profession to aid young persons about to marry, House Enrolled Act No. 167, requiring the physical examination of all persons within fifteen days prior to marriage, is probably one of most important health measures passed by the 1937 Legislature.

Effective October 29, 1937, this law will be a major step in Michigan's venereal disease control program with the fundamental purpose of preventing the spread of venereal disease through marital relations and of safeguarding future generations. Operation of the law will bring to physicians approximately 100,000 persons annually for physical examinations. All laboratory tests must be made by the Michigan Department of Health or laboratories registered by this department. Laboratory tests performed by the department will be free of charge.

The department is preparing the necessary record forms, instructions and copies of the law for distribution.

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bution to county clerks who will be responsible for checking all physical examination certificates. The department will make every effort to have the regulations and records as simple as possible and will confer with the county clerks in the planning of the required forms. An educational program will also be conducted by the department to instruct the public in the purpose, value and operation of the new law.

The antenuptial physical examination law reads as follows:

House Enrolled Act No. 167

AN ACT to provide for an antenuptial physical examination; to provide a penalty for the violation of the provisions of this act; and to declare the effect of this act.

The People of the State of Michigan enact:

Section 1. All persons making application for license to marry shall at any time within fifteen days prior to such application be examined as to the existence or non-existence in such person of any venereal disease, and it shall be unlawful for the county clerk of any county to issue a license to marry to any person who fails to present and file with such county clerk a certificate setting forth that such person is free from venereal diseases. In order to obtain a certificate as required in this act, both parties to a proposed marriage shall, within fifteen days prior to making application for license to marry, submit to medical examination for the presence of venereal disease. All laboratory tests required by this act shall be made by the Michigan department of health or a laboratory which is registered by the Michigan department of health. Such tests as may be made by the Michigan department of health shall be free of charge. Laboratory tests shall include a Kahn test for syphilis, a dark field test where indicated and a microscopic test for gonococci when indicated, the specimens for which shall be submitted in a manner prescribed by the state commissioner of health. If, on the basis of negative laboratory and clinical findings the physician in attendance finds no evidence of venereal disease, he shall issue a certificate to the examinee to that effect on a form prescribed by the Michigan commissioner of health. Such certificates of negative findings as to each of the parties to a proposed marriage shall be filed with the county clerk at the time application for a license to marry is made.

Section 2. Any county clerk who shall unlawfully issue a license to marry to any person who fails to present and file a certificate as required in this act, or any party or parties having knowledge of any matter relating or pertaining to the examination of any applicant for license to marry or clinical and laboratory tests taken by any party to a proposed marriage, who shall disclose the same, or any portion thereof, except as may be required by law, shall be guilty of a misdemeanor, and upon conviction thereof shall be punished as provided by the laws of this state.

Section 3. Any physician who shall knowingly and willfully make any false statement in any certificate given by such physician under this act shall be guilty of a misdemeanor, and upon conviction thereof shall be punished as provided by the laws of this state.

Section 4. Any person who shall violate any of the provisions of this act, for which a penalty is not specifically provided, shall be guilty of a misdemeanor, and upon conviction shall be punished as provided by the laws of this state.

HEALTH EDUCATION IN SCHOOLS

Another Act of interest to physicians passed by the 1937 Legislature and given immediate effect is the so-called sex education law providing for the teaching of health and physical education and kindred subjects in the public schools. The content of House Enrolled Act No. 180 reads as follows:

The People of the State of Michigan enact:

Section 1. Section two of chapter twenty of part two of act number three hundred nineteen of the public acts of nineteen hundred twenty-seven, entitled "An act to provide a system of public instruction in primary schools; to provide for the classification, organization, regulation and maintenance of schools and school districts; to prescribe their rights, powers, duties and privileges; to prescribe penalties for violations of the provisions of this act; and to repeal all acts inconsistent herewith," being section seven thousand five hundred sixty-three of the compiled laws of nineteen hundred twenty-nine, is hereby amended to read as follows:

PART II CHAPTER XX

Section 2. It shall be the duty of boards of education in all school districts having a population of more than three thousand to engage competent instructors of physical education and to provide the necessary place and equipment for instruction and training in health and physical education;

JOUR. M.S.M.S.

and other school boards may make such provision: *Provided*, That nothing in this chapter shall be construed or operate to authorize compulsory physical examination or compulsory medical treatment of school children. The board of education of any school district may provide for the teaching of health and physical education and kindred subjects in the public schools of the said districts by qualified instructors having a degree from a school of medicine, public health or nursing: *Provided, however*, That it is not the intention or purpose of this act to give the right of instruction in birth control, and it is hereby expressly prohibited to any person to offer or give any instruction in said subject of birth control or offer any advice or information with respect to said subject: *Provided, further*, That any child upon the written request of parent or guardian, shall be excused from attending classes in which the subject of sex hygiene is under discussion and no penalties as to credits or graduation shall result therefrom.

This act is ordered to take immediate effect.

MAILING LIST FOR "MICHIGAN PUBLIC HEALTH" REVISED

The mailing list for *Michigan Public Health*, the monthly bulletin of the Michigan Department of Health, has been revised beginning with the July issue of this publication. In the revision it has been impossible to check upon all those who wish to continue to receive the bulletin; hence, there may be some physicians who were inadvertently left off the new list. The department will be glad to replace these names upon the mailing list upon receipt of names and addresses. The bulletin is sent free of charge to members of the health professions and lay persons interested in public health only upon request.

PERSONNEL CHANGES

Dr. Vida Gordon, field physician for the Bureau of Child Hygiene and Public Health Nursing, has resigned to accept a position with the University of Michigan Health Service. Succeeding Dr. Gordon will be Dr. Emily L. Ripka who comes to the department from the Children's Community Center of New Haven, Connecticut. Dr. Ripka received her medical training at the University of Minnesota and has served in the University Hospital at Minneapolis and St. Louis Children's Hospital.

Dr. Berneta Block of Korea will succeed Dr. Pearl Toivonen as field physician following Dr. Toivonen's resignation in July. Dr. Block graduated from the University of Michigan Medical School in 1926 and served her internship at Worcester Memorial Hospital, Worcester, Mass. For the past nine years Dr. Block has carried on her medical work at East Gate Hospital in Korea.

DR. C. C. CORKILL APPOINTED HEALTH OFFICER

Dr. C. C. Corkill, of Fennville, Michigan, has been appointed health director of the recently organized Ontonagon-Baraga health district. Dr. Corkill received his public health training at the University of Michigan. He has established his district headquarters at L'Anse in Baraga County.

RETURN SPECIMEN CONTAINERS

The Bureau of Laboratories reports an unusual shortage of specimen containers used in performing laboratory examinations for physicians. All physicians have been asked to return unused containers to the bureau in order that an ample supply may be kept on hand to fill current requests.

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IN MEMORIAM

Dr. K. V. Arminen

Dr. K. V. Arminen of Hancock, Michigan, died August 23, 1937, at his home, 321 Quincy Street, from heart disease, after an illness of about three weeks. Dr. Arminen was born in Finland, March 5, 1874, coming to Hancock in 1900 to teach Latin, mathematics, and chemistry in Suomi College. He graduated from Rush Medical College in 1907, and returned to Hancock, to practice till 1912, when he moved to Duluth, Minnesota. He returned to Hancock four years ago, and was engaged in the practice of medicine up to the time of his death. He was a member of the Houghton County Medical Society, and dean of the staff of St. Joseph's Hospital, Hancock.

Dr. Elmer Leslie Eggleston

Dr. Elmer L. Eggleston of Battle Creek died on July 7 of coronary thrombosis. He was graduated from the American Medical Missionary College, Chicago, in 1900. He was a member of the American Gastro-Enterological Association, past president of the Calhoun County Medical Society, and fellow of the American College of Physicians. Dr. Eggleston was formerly professor of chemistry and secretary at his alma mater, and at one time was instructor of pharmacology and therapeutics at the Detroit College of Medicine. He was on the staff of the Battle Creek Sanitarium and was a member of the editorial council of the *American Journal of Digestive Diseases and Nutrition*.

Dr. Arthur O. Hart

Dr. Arthur O. Hart of St. Johns, Michigan, died on July 28 at the age of sixty-six. He was graduated from the Michigan College of Medicine and Surgery in 1894. The Clinton County Medical Society of which Dr. Hart had been for a long time a member sends the following resolution of sympathy:

With profound sorrow the Clinton County Medical Society records the passing of a distinguished fellow-member, Doctor Arthur O. Hart, July 28, 1937.

Renowned as physician and surgeon Doctor Hart was appointed first Chief of Surgery at Clinton Memorial Hospital at its inception. As a member of this body he served the interests of his chosen specialty with extraordinary fidelity and efficiency. Outstanding among his traits were his deep sincerity, absolute fairness, unimpeachable integrity and remarkably sound judgment. Because he was wise, we looked to him for safe counsel; because he was eminently fair, we relied on him to make certain that no injustice was wrought; because he was steadfast we counted confidently on his unfailing friendship. So long as we shall live his memory will abide with us and through the years to come surgery and surgeons will reap the benefit of his unselfish work in their behalf.

It is ordered that this declaration be spread on the minutes of this Society, that it be published in the various medical journals and the Secretary of the Society transmit a copy to Mrs. Hart with assurance of our heartfelt sympathy and respect.

A. C. HENTHORN, *President*.
T. Y. Ho, *Secretary*.



Pure refreshment

Dr. Robert C. Hull

Dr. Robert C. Hull of Detroit died on July 14. He was born in Wayne, Michigan, August 29, 1887, and was graduated from the Detroit College of Medicine in 1911. He was a member of the Wayne County Medical Society, the Michigan State and American Medical Associations. He also belonged to the Rho Sigma Medical Fraternity, the Providence Hospital Internes Alumni Association and the Knights of Columbus. He is survived by his wife, Frances, seven children, Mary, Frances, Robert, Jr., William, Richard, Frank and Sally Ann; his mother, Mrs. Hattie Hull, and a brother, John.

Dr. D. D. McNaughton

Dr. D. D. McNaughton of Argyle, Michigan, died at his home, July 6 of a heart attack. He was born in Carsonville in 1866. He was graduated from the University of Michigan in 1884 and with the exception of three months at Carsonville, he practiced in Argyle over fifty years. Last winter the Huron-Sanilac County Medical Society tendered him a complimentary banquet on the completion of his half-century of medical practice. He is survived by his widow and two sons, Clark McNaughton of Tennessee and Clarence McNaughton of Detroit. He was a member of the Huron-Sanilac County and the Michigan State Medical Societies.

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◆ General News and Announcements ◆

The One Hundred Per Cent Club of the Michigan State Medical Society:

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2. Branch County Medical Society.
3. Cass County Medical Society.
4. Clinton County Medical Society.
5. Eaton County Medical Society.
6. Gogebic County Medical Society.
7. Ingham County Medical Society.
8. Jackson County Medical Society.
9. Lapeer County Medical Society.
10. Lenawee County Medical Society.
11. Livingston County Medical Society.
12. Luce County Medical Society.
13. Manistee County Medical Society.
14. Menominee County Medical Society.
15. Muskegon County Medical Society.
16. Nawaygo County Medical Society.
17. Northern Michigan Medical Society.
18. Oceana County Medical Society.
19. Ontonagon County Medical Society.
20. Schoolcraft County Medical Society.
21. Shiawassee County Medical Society.
22. Tuscola County Medical Society.

The above County Medical Societies have paid dues in full for each and every member of the County and State Medical Society. A number of other County Societies lack but a few, sometimes only one or two, of being One Hundred Per Cent. Have YOU paid your dues?

Council and Committee Meetings

1. August 11, 1937—The Council—Baldwin, Mich.—2:00 P. M.
2. August 19, 1937—Maternal Health Committee—Hotel Statler, Detroit, Mich.—11:00 A. M.
3. September 9, 1937—Maternal Health Committee—Hotel Statler, Detroit, Mich.—12:00 noon.
4. September 26, 1937—The Council—Cascade Hills Country Club, Grand Rapids, Mich.—6:00 P. M.

* * *

"The Value of the County Medical Society to the Community" was the subject of an address given by Wm. J. Burns, executive secretary of the Michigan State Medical Society, on August 31 to members of the Benton Harbor Exchange Club.

* * *

According to the National Automobile Dealers' Association, low-income families offer the largest market for motor cars; the majority of present automobile owners earn less than \$30 a week.—*News-Week*, July 31, 1937.

* * *

Many acquaintances of Mr. Paul B. Hoeber of New York, who had been long known as a publisher of medical books of superior craftsmanship, will be sorry to learn of his death following a long illness which began with a perforated duodenal ulcer. Mr. Hoeber had been for the past two or three years identified with Harper and Brothers, Publishers, where he had charge of the Medical Book Department of that firm.

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A copy of the brochure of the Michigan State Medical Society entitled "Who Wants Socialized or State Medicine!" was sent to all county medical society secretaries in Nebraska by the Nebraska State Medical Association, with confidential bulletin dated July 22, 1937.

* * *

The Association of Military Surgeons of the United States will hold its Forty-fifth Annual Convention October 14, 15, 16, 1937, at the Hotel Ambassador, Los Angeles, California. An excellent program has been arranged and eminently qualified speakers engaged.

* * *

Just a few days remain before the 72nd Annual Convention will convene in Grand Rapids. Have you made plans to attend this outstanding postgraduate meeting? Have you secured your hotel accommodations? Don't fail to attend the Grand Rapids Convention, which will be the best in the history of this organization.

* * *

Dr. O. A. Brines of Detroit, chairman of the Cancer Committee of the Michigan State Medical Society, is making a tour of the Upper Peninsula in September giving lectures on "Cancer" to nearly all of the county medical societies located in the Upper Peninsula. Doctor Brines' itinerary is as follows:

September 20, 1937 (noon), Escanaba
September 20, 1937 (night), Iron Mountain
September 21, Houghton
September 22, Ironwood
September 23, Marquette
September 24, (noon), Newberry
September 24 (night), Sault Ste. Marie

Be sure to register immediately upon arrival at the Annual Convention in Grand Rapids. Admissions to the General Assemblies of the Convention of the Michigan State Medical Society, Civic Auditorium, Grand Rapids, September 28 to 30, will be by **BADGE ONLY!**

This ruling is made to protect members of the Michigan State Medical Society, who otherwise might be crowded out by others who wish to attend the various functions of the meeting.

Be sure to register and secure your badge.

* * *

Pediatricians to Meet

The Michigan members of the American Academy of Pediatrics will hold their fall meeting at Grand Rapids, Michigan, on September 28, 1937, at the time of the Annual Meeting of the Michigan State Medical Society. A dinner will be given at the Pantlind Hotel, at 7:00 P. M., honoring Dr. A. Graeme Mitchell, Regional Chairman of the Academy. Following dinner, reports of the various committees will be read and such other business as may come before the membership at this time.

* * *

The attention of members of the profession who have under consideration scientific papers for publication is directed to the conditions of publication which appear in each number of this JOURNAL below the Table of Contents. Very frequently papers are received, written in such a way as to render proper editing impossible. The prospective writer, if sufficiently interested in composition and form of manuscript, is directed for fuller account to "Medical Writing, Some Notes on its Technique," by the editor of this JOURNAL. This little work is published by the Bruce Publishing Company of Saint Paul, Minnesota.

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Michigan physicians honored at the American Medical Association Annual Meeting, 1937:

Norman F. Miller, M.D., Ann Arbor, elected Secretary of Section on Obstetrics, Gynecology and Abdominal Surgery, A.M.A.

Parker Heath, M.D., Detroit, elected Chairman of the Section on Ophthalmology, A.M.A.

Burt R. Shurly, M.D., Detroit, elected Delegate from the Section on Laryngology, Otology and Rhinology, A.M.A.

Erwin E. Nelson, M.D., Ann Arbor, elected Vice-Chairman of the Section on Pharmacology and Therapeutics, A.M.A.

Congratulations!

* * *

Crippled and Afflicted Child Commitments for July, 1937:

Crippled Child: Total of 248. Of the total number, 104 went to University Hospital; and 144 went to miscellaneous hospitals. From Wayne County (included in above totals): Total cases, 57. Of the fifty-seven cases in Wayne County, 8 went to University Hospital, and 49 went to miscellaneous hospitals.

Afflicted child: Total of 1,428 cases, of which 229 went to University Hospital, and 1,199 went to miscellaneous hospitals. From Wayne County (included in above totals): Total cases, 456. Of the 456 cases in Wayne County, 28 went to University Hospital and 428 went to miscellaneous hospitals.

* * *

American Board of Obstetrics and Gynecology

The next written examination and review of case histories of Group B applicants by the American Board of Obstetrics and Gynecology will be held in various cities in the United States and Canada on Saturday, November 6, 1937.

The next general examination for all candidates

(Groups A and B) will be held in San Francisco, Cal., on June 13 and 14, 1938, immediately prior to the American Medical Association meeting.

Application blanks and booklets of information may be obtained from Dr. Paul Titus, Secretary, 1015 Highland Building, Pittsburgh, Pennsylvania. Applications for these examinations must be filed in the Secretary's office not later than sixty days prior to the scheduled dates of examination.

* * *

The next annual Inactive Duty Training Period for medical reserve officers of the Army and the Navy will be held in Rochester, Minnesota, at the Mayo Clinic under the military supervision of the Surgeon of the Seventh Corps Area (Army) and the Surgeon of the Ninth Naval District (Navy) from October 3 to 16, inclusive.

The morning hours are devoted entirely to professional training given by the various departments or sections of the clinic. The afternoon hours are devoted to lectures on professional subjects or military medicine. The evening hours are given to lectures by distinguished visitors and the presentation of medico-military subjects. The meeting is given for reserve officers of the Army and the Navy, and due military credits are given for attendance.

Applications should be submitted to the Surgeon of the Seventh Corps Area, Omaha, Nebraska, or to the Surgeon of the Ninth Naval District, Great Lakes, Illinois.

* * *

The Tenth Annual Graduate Fortnight of the New York Academy of Medicine will be held November 1 to 12 and will be devoted to a consideration of *Medical and Surgical Disorders of the Urinary Tract*. The subject will include Bright's disease, arterial hypertension, and infections, tumors,

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calculi and obstructions of the urinary tract, and will exclude venereal disease, diseases of the genitalia and gynecology. Twenty important hospitals of New York will present coordinated morning and afternoon clinics and clinical demonstrations. At the evening meetings prominent clinicians of New York and many other leading medical centers of this country who are recognized authorities in their special fields will discuss the several aspects of the general subject. The medical profession is invited to attend. A complete program and registration blank may be secured by Writing Dr. Mahlon Ashford, The New York Academy of Medicine, 2 East 103rd Street, New York City.



**The Female of the Species
Seen Through at Last**

The Transparent Woman, a remarkable example of modern ingenuity, was created at the Hygiene Museum in Dresden, Germany, and brought to this country by Mr. S. H. Camp of Jackson, Michigan. She was on view at the last annual session of the American Medical Association and at numerous medical centers throughout the East. This lady is a graceful lifesize figure, standing erect with her arms upraised. She is quite unique, being the only one of her kind in existence. From a distance, she appears to be of silver, but on closer observation, her internal structure can be plainly seen. Every bone, arteries and veins and principal organs are all visible in three dimensions. At the base of the statue is a row of buttons by means of which each organ can be illuminated in its natural color. The position and relationships of each organ in the body can be clearly seen as they are lit up, one by one. This remarkable lady will be shown from September 21st to September 30th in the Jackson County Building.

* * *

Harper Nursing School Reopens

The Harper Hospital School of Nursing, which has not admitted students since the autumn of 1932, will resume its activities in September this year. This school, formerly known as the Farrand Train-

SEPTEMBER, 1937

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* * *

Interstate Postgraduate Association

The International Assembly of the Interstate Postgraduate Medical Association of North America, under the presidency of Dr. John F. Erdmann of New York, will be held in the beautiful new public auditorium of St. Louis, Missouri, October 18, 19, 20, 21, and 22, with pre-assembly clinics on Saturday, October 16, and post assembly clinics, Saturday, October 23, in the hospitals of St. Louis.

The aim of the program committee, with Dr. George Crile as chairman, is to provide for the medical profession of North America an intensive postgraduate course covering the various branches of medical science. The program has been carefully arranged to meet the demands of the general practitioner, as well as the specialist. Extreme care has been given in the selection of the contributors and the subjects of their contributions.

The St. Louis Medical Society will be host to the Assembly and has arranged an excellent list of committees who will function throughout the assembly.

A tentative list of the distinguished teachers and clinicians who will take part on the program may be found on page 723 of the advertising section of this JOURNAL.

A most hearty invitation is extended to all members of the profession who are in good standing in their State or Provincial Societies to be present.

A registration fee of \$5.00 will admit each member to all the scientific and clinical sessions.

For further information, write Dr. W. B. Peck, Managing-Director, Freeport, Illinois.

* * *

Dr. Hugo A. Freund on Welfare Commission

Dr. Hugo A. Freund, a practicing physician in Detroit since 1907, has been appointed a member of the Public Welfare Commission by Mayor Couzens for a four-year term. He succeeds George M. Read, who resigned July 1.

The appointment places two physicians on the commission, the other being Dr. Fred H. Cole. The commission is headed by James Fitzgerald and Mrs. Henry Wineman is the other commissioner.

A native Detroiter, Dr. Freund was educated in the public schools here, and was graduated from the University of Michigan, where he later taught. He has been an attending physician at Harper Hospital since 1909, and consulting physician at Receiving Hospital and the Children's Hospital of Michigan. During the World War he was a captain in the Medical Officers Reserve Corps.

Dr. Freund was first appointed to the Board of Health by Mayor Oscar B. Marx and was reappointed by succeeding mayors. He is a former president of the board.

Aside from his training in Michigan, Dr. Freund spent a year in Munich and Berlin, studying. He was a member of the committee of three, appointed by Mayor Couzens in 1934, to make a thorough investigation into the operation of Receiving Hospital. The investigation substantiated charges made by

JOUR. M.S.M.S.

GENERAL NEWS AND ANNOUNCEMENTS

Arthur T. Mitford, who recommended the dismissal of Dr. E. T. Olsen, then superintendent of Receiving Hospital. Dr. Olsen resigned under fire. —*Detroit News*, July 14, 1937.

* * *

Annual Meeting Upper Peninsula Medical Society

The fortieth annual meeting of the Upper Peninsula Medical Society took place in Houghton, August 19 and 20, with ninety-five physicians and ladies registering for two days of scientific program and social events.

A brief résumé of State Society affairs and projected activities of organized medicine was given by President Perry, Secretaries Foster and Burns, Chairman of the Council Urmston, and President-elect Cook. Need of active coöperation of all members in activities of organized medicine was stressed, and the necessity of unabated interest in legislative matters affecting the profession. The excellent paper of Senator Munshaw of Grand Rapids will appear elsewhere in the *JOURNAL*.

The scientific program included talks by Dr. Hart, Minneapolis; Dr. D. L. Cleveland, Milwaukee; Dr. Michael L. Mason, Chicago; Dr. Avery D. Prangen, Rochester; Dr. Lundy, Rochester; Dr. Ransome, Ann Arbor; Dr. Steele, Ann Arbor; Dr. Wilson, Ann Arbor; Dr. Rodda, Minneapolis; Dr. Hirschman, Detroit; Dr. Cummings, Ann Arbor; Dr. De Takats, Chicago; and Dr. Penberthy, Detroit.

A turkey dinner was served Thursday evening, with entertainment by the Singing Violins and the Copper Country Quartet. Souvenirs in the form of copper ash trays were presented to the men, and roses to their ladies. Dr. Hirschman presided with appropriate introductions. Featured were some Cornish dialect stories by Mr. Gries. Dr. Whiteshield of

Trout Creek closed the program with appropriate selections from his own poems.

Sixty-five ladies enjoyed luncheon at the Lake Breeze Hotel, and the drive over the Brockway Mountain in the afternoon. Friday the ladies had luncheon at the Onigaming Club, and were addressed by Mrs. Fitzgerald, president of the National Ladies' Auxiliary.

Business of the organization was transacted Friday morning, Dr. W. T. King of Ahmeek being chosen president; Dr. F. C. Bandy of Sault Ste. Marie, vice president. The next meeting is to be held at Sault Ste. Marie, in 1938.

* * *

Examinations—American Board of Obstetrics and Gynecology

The next examinations (written and review of case histories) for Group B candidates will be held in various cities of the United States and Canada on Saturday, November 6, 1937, and Saturday, February 6, 1938. Application for admission to these examinations must be filed on an official application form in the office of the Secretary at least sixty days prior to these dates.

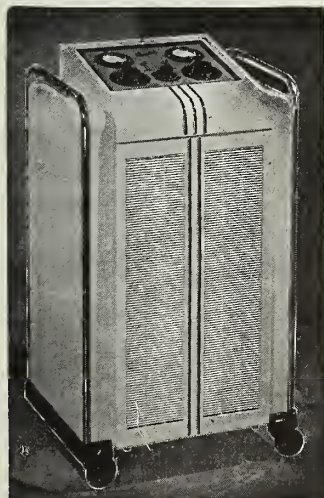
The general oral, clinical and pathological examinations for all candidates (Groups A and B) will be conducted by the entire Board, meeting in San Francisco, California, on June 13 and 14, 1938, immediately prior to the meeting of the American Medical Association.

Application for admission to Group A examinations must be on file in the Secretary's Office before April 1, 1938.

For further information and application blanks address Dr. Paul Titus, Secretary, 1015 Highland Building, Pittsburgh, (6), Pa.

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Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

THE PRINCIPLES AND PRACTICE OF CLINICAL PSYCHIATRY. By Morris Braude, M.D., Associate Clinical Professor of Psychiatry, Rush Medical College, the University of Chicago, Attending Psychiatrist, Cook County Psychopathic Hospital, Chicago. P. Blakiston's Son & Co., Inc., Philadelphia, 1937.

AN INTRODUCTION OF DERMATOLOGY. By Richard L. Sutton, M.D., Sc.D., LL.D., F.R.S. (Edin.), Professor of Dermatology, University of Kansas School of Medicine, and Richard L. Sutton, Jr., A.M., M.D., L.R.C.P. (Edin.), Instructor in Dermatology, University of Kansas School of Medicine. Third edition, St. Louis, The C. V. Mosby Company, 1937. Price, \$5.00.

OBSTETRIC AND GYNECOLOGIC NURSING. By Frederick H. Falls, M.S., M.D., F.A.C.S., Professor of Obstetrics and Gynecology, University of Illinois College of Medicine, and Jane R. McLaughlin, B.A., R.N., Supervisor of Department of Obstetrics and Gynecology, Research and Educational Hospital, University of Illinois College of Medicine. The C. V. Mosby Company, St. Louis, 1937. Price, \$3.00.

A MANUAL OF RADIOLOGICAL DIAGNOSIS FOR STUDENTS AND GENERAL PRACTITIONERS. By Ivan C. Tchaperoff, M.A., M.D., D.M.R.E. (Camb.), Assistant Radiologist and Radium Registrar, St. Thomas Hospital, London. With a foreword by Philip H. Mitchiner, M.D., M.S., F.R.C.S. William Wood & Company, Baltimore, 1937. Price \$6.00.

This is one of the best handbooks on the subject of radiologic diagnosis we have yet seen. The author prefaces his description of the pathologic process with a description of the normal. He covers the whole field of radiologic diagnosis. Many of his descriptions are as brief and concise as dictionary definitions. It is an admirable book for the medical student and the general practitioner rather than the x-ray specialist. However, as a *multum in parvo* the roentgenologist will find it a refreshing volume.

DEXTROSE THERAPY IN EVERYDAY PRACTICE. A Survey of the Literature of 1900-1936 on the Experimental and Clinical Studies Applicable to Medicine and Surgery, by E. Martin, Sc.D., New York, with forewords by W. N. Howorth, F.R.S., Director of the Department of Chemistry, University of Birmingham, England, and Bernard Fantus, Professor of Therapeutics, University of Illinois College of Medicine, with 44 illustrations, including fifteen full page plates. Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, New York and London, 1937.

Dextrose, as everyone knows, is employed as a therapeutic and nutritive agent over a wide field in medicine and there has been a vast accumulation of papers treating some phase of the subject since the opening of this century. This volume contains a bibliography of over 2,000 items covering this period. The importance of the uses of dextrose may be estimated when we realize that in the animal organism it is the primary substance of carbohydrate metabolism. Dextrose, as is well known, has a life saving value in many critical conditions. The author discusses its uses in alimentary disturbances, deficiency diseases, allergy, infectious diseases, cardiac and circulatory disturbances, genito-urinary diseases, diseases of the nervous system and surgery. He also contributes an interesting chapter on Modes of Administration, in which we gladly select the following: "Dextrose may be introduced into the human body enterally; per os or per rectum, and parenterally; by subcutaneous intro peritoneal, intramuscular or intravenous injection. The most natural and common route is by mouth." Widely

(Continued on page 724)

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Interstate Postgraduate Medical Association of North America
Public Auditorium, St. Louis, Mo. OCTOBER 18-19-20-21-22, 1937

Pre-assembly Clinics, October 16; Post-assembly Clinics, October 23, St. Louis Hospitals
 President, Dr. John F. Erdmann; President-Elect, Dr. Elliott P. Joslin
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 Dr. Thomas C. Hunt, London, England.
 Mr. W. Hugh Cowie Romanis, F.R.C.S., London, England.
 Mr. Wilson H. Hey, F.R.C.S., Manchester, England.
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Final program mailed to all members of the medical profession in good standing, September 1.

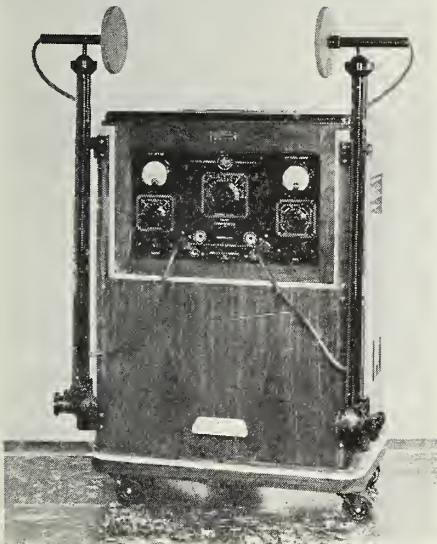
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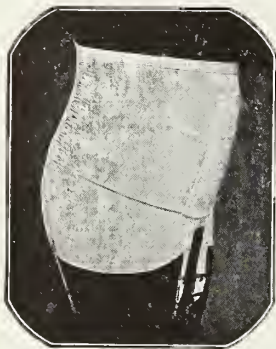
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used as dextrose has come to be, it is hoped that this work will result in more intelligent use of dextrose, not only as a therapeutic agent, but as a food in conditions which justify its use and that the oral method will be given preference where no particular emergency demands some one of the other methods of administration.

AMERICAN RED CROSS FIRST AID TEXTBOOK, prepared by the American Red Cross for the instruction of First Aid Classes. Revised 1937, 256 pp., 114 illustrations. P. Blakiston's Son & Co., Inc., Philadelphia, Pa.

This revised edition is intended to give instruction to classes in First Aid as to the emergency treatment of accident victims. One chapter gives a brief discussion of the anatomy and physiology of the body. Other chapters are devoted to: Dressings and Bandages; Wounds; Shock; Artificial Respiration; Injuries to Bones, Joints and Muscles; Injuries due to Heat and Cold; Poisons; Unconsciousness; Common Emergencies; Transportation, and First Aid Kits. The text is amply illustrated by photographs and drawings.

MANUAL OF THE DISEASES OF THE EYE, For Students and General Practitioners. By Charles H. May, M.D., Consulting Ophthalmologist to Bellevue, Mt. Sinai and French Hospitals, New York; Formerly Chief of Clinic and Instructor in Ophthalmology, Medical Department of Columbia University, and Director of the Eye Service at Bellevue Hospital, New York. Fifteenth edition, revised, with the assistance of Charles A. Perera, M.D., Instructor in Ophthalmology, College of Physicians and Surgeons, Medical Department of Columbia University, New York. With original illustrations, including 25 plates, with 78 colored figures. Baltimore: William Wood and Company, 1937.

Probably there is no more satisfactory textbook for students or for general practitioners on any medical subject than this little volume of 500 pages on Diseases of the Eye. It has been before the medical profession for such a long time, thirty-seven years, that it is scarcely necessary to more than make mention that a new edition has been put out. The fifteenth edition of May's Diseases of the Eye brings the volume up to date. Many chapters have been entirely re-written. Obsolete matter has been discarded and new matter incorporated into the textbook. Among the inclusions in this volume are Dinitrophenol Cataract, Inclusion blennorrhoea, acetylcholine therapy, "floaters," gonioscopy, pontocaine, recumbent spectacles and polaroid glass. This work will doubtless continue to be popular not only as a text book, but as a work for the general practitioner who must meet ocular emergencies at least.

YOUR DIET AND YOUR HEALTH. By Morris Fishbein, M.D., Editor, *The Journal of the American Medical Association*, *Hygeia*, *The Health Magazine*, New York, Whittlesey House, London. McGraw-Hill Book Company, Inc., 1937. Price, \$2.50.

This is essentially a book for the layman, particularly for the laywoman. It is in Dr. Fishbein's clear direct style, easily comprehended. Dr. Fishbein writes in his good-natured, whimsical way, pleasing to all readers unless they happen to include the food faddists who are handled without gloves. The book provides a goodly amount of information on the subject of diet which every layman and woman should know. Perhaps many of us who are physicians might read it with profit. All foods are discussed and there are chapters on food fallacies, Vitamins, the Child's Diet, Food Sensitiveness. Twenty-six chapters, 287 pages, appendix of tables—a very complete book divested of technical scientific terms. It is highly recommended for the class of reader who may be interested in the subject.

(Continued on page 726)

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MEDICAL WRITING. By J. H. Dempster, M.D. 168 pp. Price \$2.50. Saint Paul, Minnesota: Bruce Publishing Company, 1937. (Reviewed by Dr. Harold C. Mack.)

A few years ago, as editor of the *Detroit Medical News*, I persuaded Dr. Dempster to contribute a series of articles on medical writing. His articles, I now boast openly, were the "scoop" of the year! It is a source of pride and pleasure, therefore, to see them now expanded in book form—a neat little volume of 168 pages entitled simply "Medical Writing."

It is well to remark at the onset that this new book is a *practical* book, and not an exhaustive (nor exhausting) compendium of do's and don'ts for the aspiring medical writer. Rather, it is a series of delightful and informative essays on the technic of medical authorship. Written in his easy style, they are excellent examples of telling exposition without resort to wordy embellishments. Through the pages Dr. Dempster's kindly philosophy and humor bring home the points in a manner that makes the reader learn and remember, both easily and pleasantly. The medical writer, student or physician, will here find able counsel. For Dr. Dempster, through years of experience, has come to know the trials of writer and editor alike.

The Introduction points out briefly both the ideals and a few of the shortcomings of medical writings. In it the author quotes from authorities who have expressed themselves on this subject. From this point we are led to the first chapter, "The Editorial Function." This discussion is particularly pertinent. It gives the reader an understanding of the editor's duties and responsibilities. Indirectly it points out why medical writings should conform to certain standards—and what these standards of excellence are. Particular stress is laid on the value of concise expression. As James Russell Lowell once put it, "The art of writing consists of knowing what to leave in one's inkstand."

Chapter Two, "The Preparation of Medical Papers," is the real meat of the subject. In it is traced the evolution of the medical paper through the stages of "incubation" and "elaboration." Practical points, such as choosing a title and preparing the introduction, stumbling-blocks to most of us, open this chapter. Other sections devoted to diction, the use of connectives, grammatical reminders on number, and comforting words about the split-infinitive are extremely helpful. The reader will recognize many of his faults from the examples cited. To those of us who sense grammatical shortcomings, despite dread memories of grammar as taught years ago, this chapter is a welcome innovation. It points out rules and pitfalls without recourse to dry pedantry. Rather by examples, often humorous, always telling, Dr. Dempster illustrates besetting sins and shows the ways of salvation.

The excellent chapters on "Illustrations" and "References" are the work of the author's son, Wilfred T. Dempster, Sc.D., who also contributed the pen drawings. The meaning of such terms as "zinc etching" and "half-tone"—mysteries to the uninitiated—are explained clearly. More important still, the author describes how and when illustrations enhance the value of the manuscript. He gives detailed instruction as to their preparation for reproduction. The important matter also of labels and legends for drawings, graphs, and photographs is carefully elaborated.

The chapters, "Bibliography" and "The Listing of References," explain how the prospective author should set out to provide a background for his observations from works already published. Once these have been read and digested, the approved manner of incorporating them in the paper through citations and listings, is given detailed consideration. The

(Continued on page 728)

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care with which this is done, perhaps more than anything else, gives evidence of the writer's scholarship. This phase of medical writing cannot be too strongly emphasized. The reader will here find ample explanation.

The final treatment of the manuscript, before editing, and the important matters of type and proofs conclude the technical aspects of authorship which Dr. Dempster considers in his book. The last chapters, however, contain much additional material which the reader will find both interesting and informative. He should not pass over the gems contained in the "Dictionary" and "Greek Derivatives," nor "The History of Medical Journalism." To complete the presentation of his subject, Dr. Dempster concludes with a group of books recommended for additional reading. Appended also is a list of medical journals published in the United States.

Oliver Wendell Holmes once described a man who spoke "as one accustomed to tread carefully among the parts of speech." It is no exaggeration to say that Dr. Dempster's prose fits this description. Certainly the reader who would do likewise should obtain this book. It will do much to lighten his literary efforts and make his writings acceptable. The Dempsters, father and son, have produced a book which is both scholarly and practical.

Travel with a Smile

Life is like a journey taken on a train,
With a stranger passenger at each window pane,
I may sit beside you all the journey through,
Or I may sit elsewhere, never knowing you;
But if fate decree that I sit by your side,
Let's be pleasant travelers, for it's so short a ride.

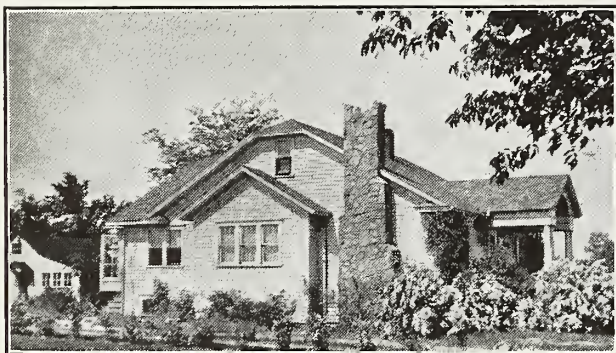
Among Our Contributors

Dr. S. E. Gould is a graduate of the Literary (1920) and Medical (1924) Colleges of the University of Michigan. He is instructor in pathology at the Wayne University College of Medicine, and director of the laboratories and pathologist at Eloise Hospital.

Dr. Thomas N. Horan is a graduate of the University of Michigan Medical School. He is physician to the Out-patient Department of Harper Hospital and a member of the visiting staff of the Medical Department of the Eloise Hospital.

Dr. Samuel J. Levin received his medical degree from the University of Toronto in 1923. He was Interne and Resident, Department of Pediatrics and Allergy, University Hospital, Ann Arbor, 1923-1925. During 1925-1926 he was Pediatric Resident at the Mount Sinai Hospital, New York. He was Instructor at the University of Michigan Medical School, 1926-1927, and Instructor at the Wayne University Medical School since 1927. His practice is now limited to Allergy, both juvenile and adult.

Dr. H. K. Shawan was graduated A.B. from the Ohio State University in 1905, and M.D. from Western Reserve University in 1909. He was resident in surgery at the Lakeside Hospital, Cleveland, Ohio, 1909-1914, and clinical assistant in surgery, Lakeside Hospital, Cleveland, 1913. He is Professor of Surgery at Wayne University College of Medicine, 1923-1936.



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KEEP MEDICINE FREE*

HENRY E. PERRY, M.D.
NEWBERRY, MICHIGAN

Two years ago, you chose a general practitioner from the Upper Peninsula as your President-elect. At this same time, you decided upon a strong program devised primarily to aid the general practitioner. Your far-seeing plan called for more complete organization of the State Society with a central office in the capital city. You recommended changes in the medical welfare set-up of the State, and in the Afflicted-Crippled Child Acts and schedules. You urged the passage of a Basic Science Law to protect the people from ill-trained practitioners. You empowered the granting of certificates of attendance and degrees of proficiency in post-graduate medical extension work to encourage continuing education of physicians. Finally, you authorized studies to better control and prevent syphilis, tuberculosis, cancer, and accidents.

For twenty-four months I have devoted my sincerest efforts to help accomplish this general practitioner program, feeling that any benefits derived by the physician in general practice would correspondingly assist the man in limited work.

Amazing Progress

In two short years, what has been achieved for the public good by and with the help of the Michigan State Medical Society is a matter of proud record: the welfare laws and the afflicted child acts were amended by a wise Legislature, which also saw the value to the people of a Basic Science Law, and placed it on the statute books. Moreover, it passed two splendid syphilis control laws, three tuberculosis laws, and a new occupational disease bill. The post-graduate extension courses have been augmented in scope and in frequency, bringing the latest

advance in our swift-moving science to both general practitioners and specialists, in the Upper Peninsula, in the Lower Peninsula, in *every* part of the State; and the varied activities and increasing contacts of the State Society are now carefully coordinated, more and more public service is meticulously performed in the Executive Office of your Michigan State Medical Society in Lansing. Your mandates have been carried through.

As we live from day to day, we may see little change, slight progress. But when we look back at well-laid plans which have benefited by the diligence of years, we are oft amazed at the progress made.

During the past months, we have not been content merely with executing your orders; in addition, we have been making plans for the future: (a) to strengthen County Society organization; (b) to develop and execute programs for maximum distribution of medical services to all; and (c) to create a Michigan Health League.

Medical Profession a Stabilizing Influence

Rumbles and sporadic roars anent the immediate coming of socialized medicine have been heard in recent months. We all know

*President's Address delivered at the 72nd Annual Meeting of the Michigan State Medical Society, Grand Rapids, Michigan, September 29, 1937.

about the association organized by employees of the Home Owners' Loan Corporation to provide medical care for all civil employees of the United States Government! This movement is said to be supported morally and financially by the Federal Home Loan Bank Board and the H.O.L.C. and their related agencies. The Maverick Bill, calling for a \$3,000,000 cancer *treatment* in Washington, was introduced at the last session of Congress. Late in July, the Lewis Resolution was introduced into the United States Senate *to establish all licensed medical practitioners as employees of the national government!*

Not in any spirit of criticism or bitterness do we refer to the above and lesser activities of similar import, but to impress on our minds a realization of our own delinquency, our failure in permitting only one side of this highly controversial problem to be disseminated to the people throughout the years. It has not been wholly our fault. Our work forces us to labor almost exclusively with others of our own calling. Our hospitals—the factories of our life—contain only the sick and those who care for the sick. We live and think in our own world, seeing little of other groups, enjoying few avocations. The penalty of Medicine is esoteric devotion to Medicine! But therein lies our responsibility. If we love Medicine and its heritage—the greatest of any profession—we must do all in our power to preserve it. If the aggressor attacks even while we are busy at our important work, nevertheless we must leave the field and go to the Front. Every physician knows the fallacy of most arguments favoring socialization of medicine. He must stop to tell the *facts* to the people, his clients, his friends; they deserve this information. The doctor must consult with lay groups and seek opportunities for such discussion wherever possible. Only by such consultation and advice can our profession act as a stabilizer at this time when so many unsound plans for changing the economic relations of patient and physician are being presented. Doctor, you Know the Truth; your Duty is to Spread Your Knowledge.

Unity of Purpose—Organized Effort

In this practical world, battles are not won by words alone. The preservation of Medicine's principles, so vital to the people's well-being, demands *unity of purpose and organized effort*. When we leave the field and go to the Front, we join a squad; we become part of a company, a regiment, an army. *We must fight, along with others, against a common enemy.*

It is for this reason that we have recommended strong county medical society organization, so it assumes medical leadership in the community; that we have urged each county medical society to develop and put into early operation programs, best applicable to the particular county, to afford the greatest distribution of medical services to all groups; that we have advised the formation of a Michigan Health League, primarily an organization of the people but including physicians, dentists, nurses, pharmacists, et cetera, for greater and continuous protection of everyone's health in this State.

Fight Inferior Medicine

Doctors, the time for speculation is over. What we need now is *united ACTION*. We are in the Right. We have no selfish, profiteering motives. We have at stake great Principles, tried and true. Our ordained responsibility is the protection of the people's health. We fight inferior Medicine. We must stand one great, unified phalanx *to defend* Medicine from adulteration. We brook no battles, *but if there is to be a war, let us be prepared for war, nay, TO WIN THAT WAR!*

And now, my friends, farewell. Your General Practitioner-President leaves office with mixed feelings of pleasure and sadness—pleasure, to be relieved of the heavy burdens of this position; sadness, at parting with the fine associations which the past two years have so kindly given him. I have made wonderfully good friends. My experience has been magnificent. To all of you, many thanks!

I leave you, Physicians of Michigan, with favorable omens. You have capable leaders, a fine organization, a noble cause of action. You have but to persevere in the good fight, to keep Medicine free!

ARE PROFESSIONS BEING COMMERCIALIZED AND MECHANIZED?*

SENATOR EARL W. MUNSHAW
GRAND RAPIDS, MICHIGAN

As a lawyer and a legislator, with human imperfections, I shall endeavor to present to you a subject which has been greatly publicized, and, like every other major problem, should be freely discussed and due consideration given it by the American people.

In discussing this subject, it must necessarily be limited to those professions dealing with the human body.

I shall first speak of the dental profession. There exists at the present time in the dental profession, in the United States, a small minority of advertising dentists; few of whom can be classed as skilled, conscientious dentists. When I was Prosecuting Attorney of Kent County, Michigan, I was called upon to and did prosecute violations of the laws relating to the practice of dentistry. Violations still exist, and complaints are many regarding the type of work performed by these so-called advertising dentists. They are not interested in the welfare of their individual patients. Their one desire is to attract the poor unfortunate and gullible public, under the guise that they are skillful and painless in their operation, and inexpensive.

Prior to engaging in these activities, many of them were unable to interest a sufficient number of patients to bring them even an ordinary income and livelihood. They conceived the idea that by advertising, the unsuspecting public would seek their services.

Until recently they sought to enlarge upon their operations, and employed solicitors for the purpose of procuring patients for dental work. They held public demonstrations for the purpose of offering, selling, or giving away any cure or nostrum in order to induce such person or persons to enter their dental offices.

It is quite apparent, from data which have been procured in the State of Michigan, that many false and fraudulent representations have been made inducing patients to come to their advertised offices.

Since the advent of electric signs and radio, dentists have advertised by electric display signs and over the radio, and in the newspapers, their superiority in the performance of their professional services. They have advertised prices for professional services. They have displayed, on glaring light signs, a tooth, teeth, bridge work and portions of the human head. They have advertised free

dental work, free examinations, and the performance of painless extractions.

This method of advertising is but bait for the unsuspecting public. In other words, the dental profession is being commercialized. The main arguments used to justify their action is that the ordinary individual, who has little financial means, is able to receive dental work for a small consideration.

Family and group agreements are made for the purpose of obtaining dental services, even by the year. The filling and preservation of teeth has not been their chief concern. They prefer to remove teeth that could be treated or filled, and substitute therefor plates, or sets of teeth. In many instances they advertise plates for as low as \$5.00 each, when as a matter of fact, if the patient survives the removal of his teeth, he is advised that a plate which would fit would cost approximately \$100.00. No financial saving would thus be made, and in many instances patients have thereafter of necessity been treated by dentists who do not advertise.

The continuation of this method of advertising is a serious injury to the public. It is condoned by some newspapers, who obtain their advertising, and by some broadcasting companies, who receive consideration for the time used on their radio stations. Broadcasting companies should disseminate information beneficial to the public, but in these specific instances such commercialization should be eliminated, the public should be considered, and their burdens and woes not increased.

During the 1933 Session of the Michigan State Legislature it became and was my duty as State Senator from the 16th District of Michigan to study and review certain legislation brought before it pertaining to abuses existing in the dental profession. It became my further duty as a member of the

*Read before the Upper Peninsula Medical Society, August 19, 1937.

Legislature to give this subject serious thought and consideration. Corrective legislation is always opposed by selfish individuals and interests. During that session, I personally sponsored, in the Senate, the Dental Bill, which corrected some of the existing evils which I have just referred to. However, the most flagrant ones still exist, and would have been eliminated had the present Legislature passed such corrective measures as were before it for consideration.

In the past session of the Legislature, I personally sponsored House Bill No. 594 in an attempt to correct these evils, but the opposition that came from those persons who were only interested in the profits derived from dentistry were successful in defeating the passage of the bill by one vote.

Again its foes consisted of those advertising agencies which benefited by reason of dental advertising. The public was not sufficiently aroused. Neither were some of the Legislators. Fortunately the medical profession has attempted to educate the public, and has used its influence to eliminate such abuses.

It might as well be said that in the legal profession lawyers should advertise with large electric display signs such as, "Consultations Free"; "Cut Rates"; "Superiority in the Trial of Cases, and Drafting of Papers," and perhaps they should go to the extent of giving free movie exhibitions of their prowess and ability in the trial of cases in court.

We find even greater abuses existed in the field of optometry; for example:

Until the present Legislature passed House Enrolled Act No. 189, at the last Session, canvassers were employed to solicit from house to house, and in places of employment throughout the State of Michigan, for the purpose of selling glasses, conducting eye examinations, and performing optometric services. It is a fact that many of our larger employers of labor made contracts with these canvassers, or permitted such solicitations in their industrial plants for the purpose of selling glasses, making eye examinations, and performing optometric services.

Untruthful and misleading statements have been made personally and in advertising by such solicitors. They were made with the intention of deceiving and misleading the individual, and the public, under the guise of "Eyes Examined Free"; "As Low

As"; "Up"; and "Honest Prices." In many instances throughout the State of Michigan, premiums such as a set of dishes and other articles were given for the purpose of selling eyeglasses. If a club could be formed, or a group, special gifts, special premiums, and at least a twenty per cent discount was given for the purpose of encouraging the purchase of eyeglasses. Imagine such stupidity and ignorance, when vision is to be corrected. Such advertisers do not have the welfare of their patients at heart. They have but one principal idea in mind; namely, profits at the expense of the human eye, and, as a result, the probable maladjustment of the human body, without a correction of inherent diseases. In those instances, seldom, if ever, was a medical diagnosis made.

Glaring examples of this situation appear in the *Reader's Digest* of August, 1937; and should be vividly and forcibly brought to the attention of the public, unless we are to have a generation of sightless people.

One large factor which has endeavored to commercialize the profession of optometry is the department stores, who have installed departments of optometry, as they say, "to keep abreast of the times." Although, in some instances, they are supervised by a doctor of optometry, yet seldom are they adequately equipped to determine proper corrections. They are primarily interested in the sale of glasses and the profits which necessarily follow. It is a well known fact that the average lens can be purchased at wholesale, or in quantities, for less than \$1.00 each, and in most instances a complete set of lenses, with frames, sells for \$15.00 and up.

Such commercialization of professions should cease and be eliminated. The eyesight of the public cannot be bought or sold, and should be jealously protected and preserved.

In the professions of dentistry and optometry, it is apparent that commercialization and mechanization are rampant, and it behooves those who practice dentistry and optometry ethically, to be on guard and protect the public, and prohibit their professions from becoming more commercialized and mechanized. They both are respected and necessary professions, and must ever exist as such.

The medical profession is likewise approaching a position of being socialized. Commercialization and mechanization are

almost identical in their application. Either or both of these words can be used as synonyms to the words "socialized medicine and state medicine."

Socialized and state medicine originated in Germany and was promoted by Bismarck, a dictator during his reign as Chancellor. His subjects were then in a state of unrest. In order to pacify them and settle Germany's domestic difficulties, and present a united front to nations who were unfriendly with him, he determined upon the idea of giving to the workers some medical assistance at the expense of the state. He believed that by so doing he would allay their unrest, cause them to become nationalistic, and fight, if necessary, for the preservation of their fatherland. This he did, and as a result other European countries became inoculated with the same idea, and established similar systems for similar and other reasons.

In this country agitation in state medicine started in social and philanthropic agencies, because it was working to some extent in Europe. In some instances paid members of hospital staffs, and occasionally city and county physicians, desired it as an experiment. The perpetuation of their positions and income would thereby become more secure.

It no doubt can be said that a good percentage of the unsuccessful medical practitioners, which fortunately are few in number, advocate social and state medicine, due to the fact that they have been unable to adequately support themselves in private practice and desire security by way of a salary paid by the State.

The formation of employers' group insurance, the panel system, industrial medicine and salaried medical services, have been promoted for but one primary purpose, to reduce the so-called overhead cost for which a minimum of service is given.

At the present time there is no popular demand for state or socialized medicine. However, there is much talk about it, and many articles have been written both pro and con. It is not and will never be a part of real social security. It is social insecurity, and nothing short of regimentation, and the mechanization of the medical profession. Where patients must be distinguished and given widely different and suitable treatment, the mass action of government is seldom successful. The result of the professional services performed by the

average unskilled regimented army surgeon would be a fair comparison to what would eventually happen to the average medical doctor under a mechanized system.

The State does establish quarantine to protect people against invasion of disease. It does collect and tabulate vital statistics of the whole population; assists in health education; urges extensive preparation in immunization, and thereby prevents the spread of epidemics. The medical profession has always aided and encouraged such state activities, and will continue to do so. Medical services do not fit into time tables.

Hippocrates taught the art of observation and called attention to the importance of the individual relationship of the physician to his patient.

Most ancient physicians recognized the fact that some persons could inspire the patient with a desire to recover, and could apparently aid that peculiar power lying within the body known as "the power within living tissue that urges it to repair." Under socialized medicine, this individual relationship could not exist. It would be destroyed.

Perhaps it is true that the cost of medical care has increased, but justly so. In the United States, statistics show that, on the average, human beings are living longer. Their length of life has been increased, and the death rate among children has decreased considerably. Therefore, the medical profession is to be encouraged and commended.

A single point in the life history of an ailing individual may explain the major part of his symptoms and his distress. Not infrequently that point is carefully concealed from everyone except the personal physician in whom the patient has the same confidence that members of some churches have in their spiritual advisors.

The American Medical Profession, on the average, leads the world, and is composed of a group of highly respected and able men and women. Prior to 1936, members of the American Medical Profession received Nobel prizes for unusual ability and skill in their respective fields.

Industrial medicine and salaried medical services are impersonal. Many of its subscribers, when emergencies arise, prefer and seek out a personal physician. Industry should condemn the commercialization of the medical profession.

The medical profession is beginning to recognize the influence of the mind in dis-

ease, and in the treatment of disease, a factor which is invariably lost in mechanized practice.

State or socialized medicine is practiced in Germany, Italy and Russia, and in a modified way in Great Britain. It has been subjected to political patronage and plunder as a service of the State. In general, the medical profession in Europe has been demoralized through political maneuvering for the most remunerative contracts. Germany has a health insurance scheme, developed through sick societies. Great Britain has a panel system permitting families to pay a regular fee each week or month to a medical doctor for all of their care. Doctors of Medicine and Surgery are registered and permitted to do private practice in addition to that which they receive through their registry. The purpose of such registration is to assure the unskilled or less successful doctor of a livelihood which in many instances he would be unable to receive. Other doctors who have a more exclusive class of patients necessarily prosper for the reason that the greatest part of their time is devoted to their private practice. The average person who receives medical attention from the less successful and unskilled doctors under the panel system cannot hope to receive the best medical skill or attention which would bring about his recovery.

In the United States medical doctors are available in most communities. Our medical field is a broad one. State medicine might be acceptable in European countries where medical doctors are few, where the population is confined, where the right of the individual to succeed is limited, and where the breath of real freedom seldom exists. Are we to regress?

Under state medicine the cost per individual would be approximately \$30.00 per year. Under our taxation system, the laborer, the farmer and ultimate consumer would pay such additional tax, and thus be overburdened. State medicine may be a beautiful theory, but in practice it would degenerate into political plunderings, the cost of which would be prohibitive.

In 1930, 12,000 teachers were out of a job—able to work, and looking for a job. Education is a standardized system. Would the same thing happen to the medical profession?

The standards of medical practice in State medicine are lowered because it is the tend-

ency of the contract doctor to see as many patients as possible, and as a result he is unable to provide adequate individual attention. Initiative is lost, and advancement of the individual doctor is dependent upon his individual ability to pull wires.

Disease and education differ widely, even though many exposed to both fail to get either. Health and ignorance are alike in only a few features, and within those limits the state is already active.

Ninety per cent of the population today are better satisfied with their doctor than they are with their landlord, their grocer, their clothier, their preacher, or the teacher of their children.

If socialization of medicine is the panacea, then we should socialize fuel, clothing and food, and become a race of robots.

From my experience as a legislator, and as an individual who is vitally interested in the welfare of the medical profession, I desire at this time to bring forcibly to your attention the fact that there is a slow, insidious process now going on in the United States, which evidently is attempting to commercialize and socialize the lesser and weaker of the professions. As a result it is absolutely certain that the medical profession will be seriously and permanently affected. Unless the individual members of the medical profession seriously understand its probable consequences, it too will be commercialized and socialized, and state medicine will become an actual fact. I cannot too strongly urge you to consider this danger in this personal appeal to each of you.

You have, as representatives in your association, able men who are giving their time and attention to all matters which are of interest and vital concern to the medical profession. If and when you are called upon to protect or promote the interests of your profession by these men, both in the county, state and national organizations, you should immediately respond and give your attention and efforts to those matters, or suffer the consequences of your stupidity. Otherwise, the time will come when the medical profession will be ultimately commercialized, subsidized and consumed, and you will then say to yourselves, "How did this happen?" Then it will be too late. This result, if it ever comes, will not be brought about by some edict, decree or law. It will come as a result of your utter lack of interest, and by the fact that you have failed to put forth

those natural efforts in preventing this slow insidious process of bringing about socialization of medicine.

Socialization will bring about the ultimate decay and destruction of these professions. To stop inroads into these professions, its practitioners who are treating disease and imperfections of the human body should ever be vigilant, and coöperate collectively. It is the price of life and liberty.

You as individuals and as an organization should place and keep your professional ethics on the highest plane possible. You are dealing with human beings. You should

march on as you have in the past, performing public work unstintingly, and giving to humanity your best.

You should at all times be allowed to maintain your individual initiative so that you may delve into fields of medicine and surgery not yet discovered.

Under no circumstances are you to become socialized in the present sense of the word, nor mechanized as an instrument, but at all times actuated by that divine pronouncement "HEAL THE SICK" which will live through the ages.

SINGLE-HANDED CITRATED BLOOD TRANSFUSION APPARATUS*

WARREN B. COOKSEY, M.D., F.A.C.P.
DETROIT, MICHIGAN

As evidence of the fact that the present day methods of blood transfusion leave much to be desired in the matter of simplicity and universal workability, is the fact that the past few years have seen numerous new blood transfusion devices presented for consideration and trial. There has been a very rapid trend in most hospitals toward the indirect methods of transfusion, until in many localities a direct method of blood transfusion is now rarely, if ever, used.

It has occurred to the author that the two most needed improvements in the present methods of citrate transfusion is to devise a more simple method of creating suction in obtaining the blood and citrate, and to have available an apparatus which would permit of blood administration without transfer to any other receptacle. If, in addition to these two essential improvements could be added the possibility of one operator, without additional aid, being able to draw, mix and administer the blood, a distinct improvement in all previous methods would be available.

After a series of experiments, in which various methods of creating suction were tried, it was discovered that a bulb, such as is supplied for blood pressure apparatus, works admirably when the proper ball bearing valves are used at either end. When suction is obtained by the use of syringes or a Potain aspirator, sometimes too great suction is obtained, so that the vein or tubing collapses, leading to difficulty. Without any suction at all, the blood flow is sluggish unless excessively large needles are used. With

the rubber bulb type of suction, between 1.0 and 1.5 pounds per square inch of vacuum is provided, and has proved to be a very optimum amount.

For some time the apparatus illustrated has been in use at Harper Hospital, Detroit, and has been found to be most efficient under any and all conditions of use. For giving blood transfusions in the home, without any assistance whatsoever, we have found this method extremely valuable.

The essential features of the apparatus are well shown in the photographic illustration. It consists simply of a standard bottle with screw top, to which is attached an aluminum alloy handle which holds firmly in place a rubber cork for sealing the apparatus. Two holes are provided in the cork, into which may be inserted a glass tube, a rubber bulb with automatic ball bearing valves, and then later—when the bulb has been withdrawn—the usual glass fitting of an intravenous tubing outfit. The bottle is provided with a bail which is used for support of the bottle while administering the blood. The appa-

*From Harper Hospital and the Wayne University College of Medicine, Detroit, Michigan. This apparatus has been adapted to the 500 c.c. Vacoliter flask. The complete outfit may be obtained from the Baxter Laboratories.

ratus is autoclaved with bulb, glass tubing, rubber tubing and adapter ready for use. For storage purposes, the apparatus is wrapped in a light canvas covering before autoclaving.

needle, the other hand mixes the citrate and blood by a gentle rotary motion of the bottle, at the same time giving the rubber bulb an occasional compression to maintain

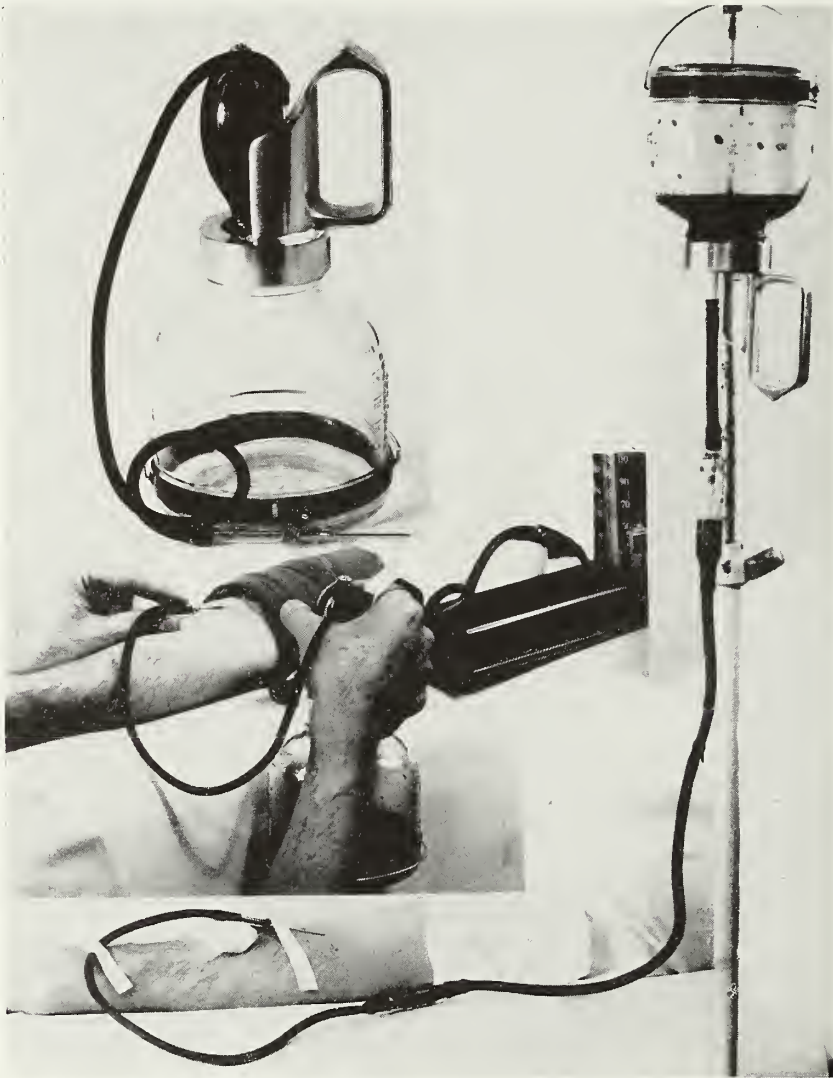


Fig. 1. Composite illustration of taking and of giving blood.

In obtaining the blood, the operator simply unwraps the sterile apparatus, inserts a No. 16 needle into the adapter, then drops both into an ampoule of sterile 2.5 per cent sodium citrate, compresses the rubber bulb a few times, and 10 c.c. of the citrate is drawn into the bottle for every 100 c.c. of blood to be used. For taking blood from the donor, a sphygmomanometer cuff must be used on the donor's arm with pressure set at about the diastolic level. Now the needle is inserted into the donor's vein and, as shown by the diagram, while one hand steadies the

the necessary vacuum. The handle shield prevents contamination of the glass tubing which is in the up position while drawing blood so that the inflow may be observed at all times. When sufficient blood has been obtained, the rubber bulb is withdrawn from the cork, the glass tubing is pushed down to serve as air vent, and a regular intravenous tubing set is connected to the hole from which the rubber bulb was taken. The bottle is then suspended in the reverse position by means of the bail. By using intravenous sets with a visible dropper, it can be seen at

all times whether or not the blood is flowing properly into the vein. A No. 18 needle is used in giving the blood to the recipient. The blood is kept warm by placing a hot water bottle over a part of the tubing near the recipient's arm. Up to 600 c.c. of blood may be drawn by this apparatus, and a portion held over in the ice box for giving the next day—without transfer of the blood, if it is desired. If the apparatus is properly used, so that there is a continuous flow of blood from the donor, no clots will form, and hence filtration of the blood is not necessary. In over five hundred transfusions with this apparatus, no filtration has ever been used; and it has been shown, we believe, to be entirely superfluous.

Where it is desired to preserve the blood for several weeks, as is now being done for the so-called "Blood Bank," and as is being done for the transport of blood to the Front during war, this apparatus is extremely adaptable. As is shown in Figure 2, after obtaining the blood, a different sterile cork and screw top is substituted for the handle and bulb attachment, thus providing an air-tight seal. By this means, any number of bottles may be kept in storage, properly labeled and ready to use. All that is necessary then is to simply remove a thin rubber and aluminum seal, as is done in administering vacoliter glucose and saline solutions, and then attach a standard intravenous tubing set.

The advantages of the method consist in (1) its simplicity, (2) the fact that there is no transfer of blood from one container to another, (3) absolute sterility of blood, (4)

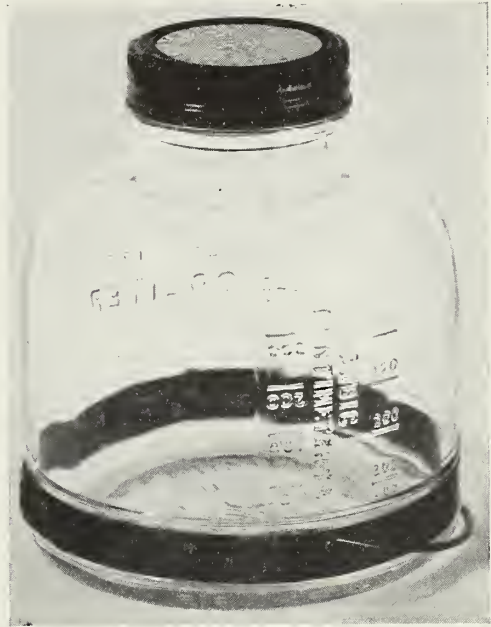


Fig. 2. Photograph of the sealed bottle for prolonged storage of the blood, or for the transport of blood to the front lines during war.

the fact that, if necessary, the operator needs no additional assistance whatever, (5) that a very convenient method of blood storage is provided, and (6) that the apparatus may be most economically produced.

THE USE OF MEASUREMENTS IN MEDICINE

WILLIAM A. EVANS, JR., M.D.
DETROIT, MICHIGAN

One who has had occasion to read in the medical literature of fifty or more years ago may be impressed by the paucity of numbers or other mathematical designations of medical phenomena. In the present day, an article in our scientific medical journals is hardly worthy of serious consideration if there are not impressive tables of figures and accompanying charts. One may well ask if our present facility in translating medical observations into the realm of mathematics always brings the increased precision which is intended.

In the exact sciences there can be no doubt that the ability to measure a phenomenon accurately often represents a distinct forward step. The science of physics has developed in both the theoretical and practical aspects in large measure because of the accurate determination of such constants as the velocity of light, the mechanical equivalent of heat, the relative atomic

weights, the charge on the electron, the spectroscopic constants, et cetera. Accurate observations of physical phenomena are the basis of new "laws," and modifications of old "laws" are often demanded by new accuracies in mensuration.

While no one may question that the qualitative use of Fehling's solution is superior

to the earlier methods in making a diagnosis from the urine of a diabetic patient, one may doubt whether an exact quantitative estimation of the sugar would heighten our diagnostic acumen. Likewise one may doubt whether any further refinements in the determination of the blood urea nitrogen would improve the accuracy of our diagnosis of nephritis. A reliable estimation of this figure, with an error within 10 per cent, is quite as valuable as one with an error less than 1 per cent. The former is certainly preferable if the latter method requires complexities which in uncertain hands may yield unknown errors.

One of the great difficulties in the use of measurements in medicine is the wide variation which must be included in the normal state, and the lack of a sharp distinction between values in a normal and in a diseased state. It is helpful to regard these measurements as of two kinds: First there are those which express constitutional characteristics and which are subject to great variations in a normal group, and second are those which are independent of the constitutional type and which in a normal group fall within a much narrower range.

This latter group owes its narrow range to the necessity for a constant internal environment in which the organism may function. In this group could be counted such measurements as the hemoglobin and red blood cell concentrations in the blood, the physical and chemical properties of the internal body fluids including tissue fluids, cerebrospinal fluid, as well as the blood plasma, and the body temperature. It will be noted that measurements of those properties will not only fall within a comparatively narrow range for a normal group of one species, but will be fairly characteristic of related species as well, regardless of the size, functions, and habits of the individuals of the species.

The simplest measurements of the first kind are perhaps those of height and weight. Obviously these vary greatly in different individuals of the same species; and it is very difficult to establish "normal" values of real significance. Attempts to apply average values to a given individual are meaningless, for the individual has his own constitutional type, the norm for which may be quite different than the average of his group. Some measure of uniformity is achieved by correlating the weight with the

height, age, and sex; and this is of some value. Some have suggested that a more valuable correlation is that of body weight and body volume⁴ and perhaps we would use this correlation of the body volume if it could be determined as easily as the height. However, even these simple correlations are imperfect; and it is impossible to predict the height or weight of an individual except within wide limits.

The vital capacity of the lungs, or the amount of air which can be expelled from the lungs after the deepest possible inspiration, is a measurement of some physiological and pathological importance. Here, again, the values vary greatly in individuals of different form and habit, and attempts at the prediction of normal values from a correlation with other bodily measurements are only partially successful. A single determination in one individual is of very little value; although a series of determinations in the same individual during the course of a disease may be of considerable significance.

The estimation of the size of the heart, particularly with regard to the presence of an early pathological enlargement, is often of great diagnostic importance. The orthodiagram and the teleoroentgenogram provide a means for measuring the cardiac silhouette with accuracy. The difficulty, however, arises in finding criteria for computing the "normal" size of the heart for the individual under study. The number and complexity of the formulæ which have been derived for correlating the "normal" heart size with the weight, height, age, sex, chest diameter, et cetera, are evidence of the difficulties involved. It is apparent that the individual variations in the size and shape of the heart are so great that a "normal" size may be predicted from other bodily measurements only within wide limits.

Another measurement of this kind is the basal metabolic rate, a measurement which is being determined with great frequency in recent years, and to which much diagnostic significance has been attached. For purposes of predicting a "normal" value the best correlation has been with the surface area, but the early workers well realized that this was far from perfect. Some workers have favored a correlation with the body weight as more reliable. Talbot⁵ and his co-workers in a recent study of a homogeneous group of girls found large individual differences in their basal metabolism. There was about

the same degree of correlation whether the weight or surface area as computed by various formulæ was used. They emphasize that Rubner's "law" of the proportional relationship of metabolism and surface area is in no sense a causal one and that the various formulæ that have been derived "merely express an accidental relationship and not a physiologic law." Similar findings were obtained by Lewis, Kinsman, and Iliff in their recent study of the basal metabolism of normal boys and girls.³ Even with special groupings made for age and sex, the very considerable range of plus or minus 15 per cent is accounted the "normal" range; and it is well known that occasionally otherwise perfectly "normal" individuals are encountered with a basal metabolic rate which greatly exceeds this range. Thus with the use of the best correlating factors it is impossible to predict the basal metabolic rate for one individual with significant accuracy and "normal" individuals may differ by as much as 30 to 40 per cent. It is apparent that a person's basal metabolic rate is a particular and characteristic feature determined in large measure by his constitutional type, but influenced in part by the degree of physical activity to which he is accustomed, his nutritional state, and perhaps the climate in which he lives. This point has recently been emphasized in studies of the Carnegie Institute¹ on the basal metabolism of different types of cattle and horses where special functions have been developed to a high degree by breeding. Both cattle and draft horses were found to have a low metabolism, while dairy cattle and race horses have a relatively high basal metabolic rate.

It is not surprising that these differences are seen among human beings, as well, where there are all varieties of draft and race horse types in which differences are not revealed by age, sex, or measurements of the surface area.

A fifth measurement of this kind is the total blood volume. Dr. Gibson and I have recently had the opportunity to make a number of determinations of the blood volume in normal individuals by a new method of improved accuracy and reliability.² In the group which we studied there were great differences between individuals and attempts at correlation of the blood volume with the height, weight, or surface area were alike of limited success. By using the best of the

correlating factors only two-thirds of the individuals fell within the plus-minus 10 per cent range of the "average normal." We found certain tendencies in the group which were very analogous to similar findings in studies of the vital capacity and the basal energy output. The blood volume was generally lower in females, slightly lower with advancing years, and lower in the obese and those of sedentary habits. It was higher in males, and particularly those of an athletic nature with generous muscular development and in good physical training. It was obvious that the blood volume of an individual was dependent upon the relative proportion of blood, rich organs (muscle, viscera, skin, et cetera), and blood-poor organs (bone, fat). The basal metabolism and the blood volume are probably both ultimately related to the amount of active protoplasmic mass and as such are constitutional features which could be predicted only imperfectly from other common bodily measurements.

These considerations are not intended to decry the importance of such measurements, but rather to emphasize their peculiar features so that their true significance may be appreciated. Such measurements as the vital capacity, the size of the heart, the basal metabolic rate, and the blood volume, are like finger prints, a fixed and characteristic feature of the individual. Once these features are determined in a normal state, fluctuations observed in the course of disease or under therapeutic measures may be of very great significance. Further, valuable observations may be made by studying average values in large comparable groups where the effect of individual peculiarities becomes minimized.

An essay with this title would be incomplete without notice of the introduction of measurements into the once purely descriptive fields of serology, pathological histology, and auscultation. The use of numbers to indicate the "strength" of a Wassermann reaction or similar test is deplorable because of false implications, and fortunately has been so discredited that it is passing rapidly. The results of such a test, are more properly designated "positive," "doubtful," or "negative." The grading of tumors as a yardstick of malignancy is carried out in many quarters and the results are accorded mathematical importance. If the relative nature of such "grading" and the subjective character of the observation is kept in mind, surely no harm is done, but too often a

significance is attached to a mathematical symbol (even though it be a Roman numeral) which it does not possess. Similar reservations must be made for the grading of cardiac murmurs, although such a procedure has the value of standardization as a basis for comparison, and future observations which purely descriptive terms could not provide. Akin to the undue impressiveness which numbers may give to these observations, is the importance attached to statistical observations of the prognosis and incidence of various factors in a disease. In reporting the incidence of some feature in a small group of patients, an author may express his findings in a percentage to four significant figures, a presumption of accuracy usually far beyond what his material warrants. Most often his finding would be more truly conveyed by such expressions as "occasionally," "frequently," or "rarely." Prognosis is always a feature of the greatest interest in any disease; and much attention has been given to

an accurate determination of various factors in prognosis. Statistical analysis of comparable groups of cases provides valuable data for a correlation of the prognosis, with the effect of treatment and other factors. It must be remembered, however, that, regardless of the accuracy with which the prognosis is known from the statistical analysis of a large series of cases, the prognosis in the individual case is wholly uncertain and indeterminate.

References

1. Carnegie Institution: The annual exhibition representing research activities of Carnegie Institution. *Sci. Monthly*, 44:509, (June) 1937.
2. Gibson, J. G., and Evans, W. A.: Clinical Studies of the Blood Volume. (1) Clinical application of a method employing the azo dye "Evans blue" and the spectrophotometer. *Jour. Clin. Invest.*, 16:301, (May) 1937. (2) The relation of plasma and total blood volume to venous pressure, blood velocity rate, physical measurements, age, and sex in ninety normal humans. *Jour. Clin. Invest.*, 16:317, (May) 1937.
3. Lewis, R. C., Kinsman, G. M., and Iliff, A.: The basal metabolism of normal boys and girls from two to twelve years old, inclusive. *Am. Jour. Dis. of Children*, 63: 348, (Jan.) 1937.
4. Spivak, C. D.: The specific gravity of the human body. *Arch. Int. Med.*, 15:628, 1915.
5. Talbot, F. B., Wilson, E. B., and Worcester, J.: Basal metabolism of girls. *Am. Jour. Dis. of Children*, 53:273, (Jan.) 1937.

OPERATIVE MANAGEMENT OF DEPRESSED FRACTURES, BULLET AND OTHER PENETRATING WOUNDS OF THE HEAD

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This report is based on eighty operated cases of simple and compound depressions and fifteen operated cases of bullet and other penetrating wounds of the skull. There were thirty-three simple and forty-seven compound depressions.

Simple and Compound Depressions

In the accompanying table salient points are brought out. It is to be noted that the mortality is much higher for compound fractures. It is also interesting to observe that the death rate is very low when the pathology involves the anterior third of the skull. Focal findings were infrequent and when present they were invariably caused by associated damage to the brain. There were six cases of hemiplegia, seven of convulsions, two of aphasia, and one of extraocular palsy. Fifty per cent of the entire group had slight or no clinical evidences of brain damage.

On the whole, indication for operation in cases of simple depression is based upon the degree of depression, regional position, and signs and symptoms caused by the depression. As a rule simple depressions are not emergency cases and one can frequently wait for several days before elevation or repair of the defect is undertaken. Slight de-

pressions in the forehead area are treated conservatively.

In case of compound fracture operation is indicated in order to obviate intracranial infection; hence, the sooner repair is effected the less the likelihood for such a complication. At times hair, bits of clothing, dirt, glass, et cetera, are found in the most remote portions of a compound depression. They do occur and the external appearance of such a lesion, however clean, should not cause one to hesitate. Cases of compound depressed fracture should never die from

MANAGEMENT OF WOUNDS OF THE HEAD—GURDJIAN

EIGHTY OPERATED CASES OF SIMPLE AND COMPOUND DEPRESSIONS

Clinical Evidence Brain Injury			Location of Fracture			Focal Signs				Ratio of Simple and Compound		Results	
Slight or none	Definite	Severe	Anterior 3rd of skull	Middle 3rd of skull	Posterior 3rd of skull	Hemiplegia and Hemiparesis	Convulsions	Aphasia	Extra-ocular palsy	Simple	Compound	Recovered	Died
39	22	19	36	39	5	6	7	2	1	33	47	66	14
			33	3	30	9	3	2		31	2	35	12
			8.5%	23.0%	40%					6.0%	25.5%	17.5%	
			Mortality Per Cent							Mortality Per Cent			

intracerebral infection. The management of simple and compound depressed fracture was discussed fully in an earlier paper. The methods of approach are as follows:

1. Debridement—if compound.
2. Removal of the area of depression, by rongeur.
3. Elevation of depression by means of a bone elevator passed under the area of depression through a small opening to one side of the defect.
4. Mass removal of the area of depression including a strip of normal bone surrounding it. After readjusting the depression, replacement of bone flap.
5. If the area of depression is beyond repair or if pieces of bone have to be discarded because of contamination, the defect may be treated by transplant from the outer layer of the skull at the same time.

It is important to plan the operative attack in these cases, particularly where such depressions occur in portions of the skull not covered with hair. With a certain amount of pre-operative planning, ugly post-operative defects may be eliminated. In our own practice we practically always use the method of removal of the entire area of depression by trephine followed by replacement of the button of bone after readjust-

ment of the depressed pieces. The indiscriminate use of the rongeur is not desirable. Of course, when the wound is hopelessly contaminated, pieces of bone are discarded. If it is at all possible the wound is closed without drainage except in the region of the frontal sinus.

Of particular interest in this group study are sixteen cases of compound depressed fracture through the frontal sinus and orbital region. The mortality is very low. The dura was found exposed in twelve cases. There were dural tears present in seven cases. Cerebrospinal fluid rhinorrhea occurred in one case ten weeks after repair. He was treated by absolute bed rest for six weeks and the rhinorrhea has stopped (two years). There was one case of brain and subdural abscess with recovery after drainage. I feel that compound depressions in this region should be operated on as soon as patient's condition permits. Simple depressions, if slight, are better treated conservatively. Operations in this area are almost always followed by devastating defects in the forehead; usually the bones are

SIXTEEN OPERATED CASES OF COMPOUND DEPRESSED FRACTURES THROUGH FRONTAL SINUS AND ORBIT

Clinical Evidences of Brain Injury			Dural Tears		Complications			Results	
None or Slight	Definite	Severe	Present	Not Present	C.N.S. Rhinorrhea	Infect.	Brain Abscess	Rec.	Died
5	7	4	7	9	1	3	1	15	1
					Rec.	Died	Rec.	Died	
					1	0	1	0	

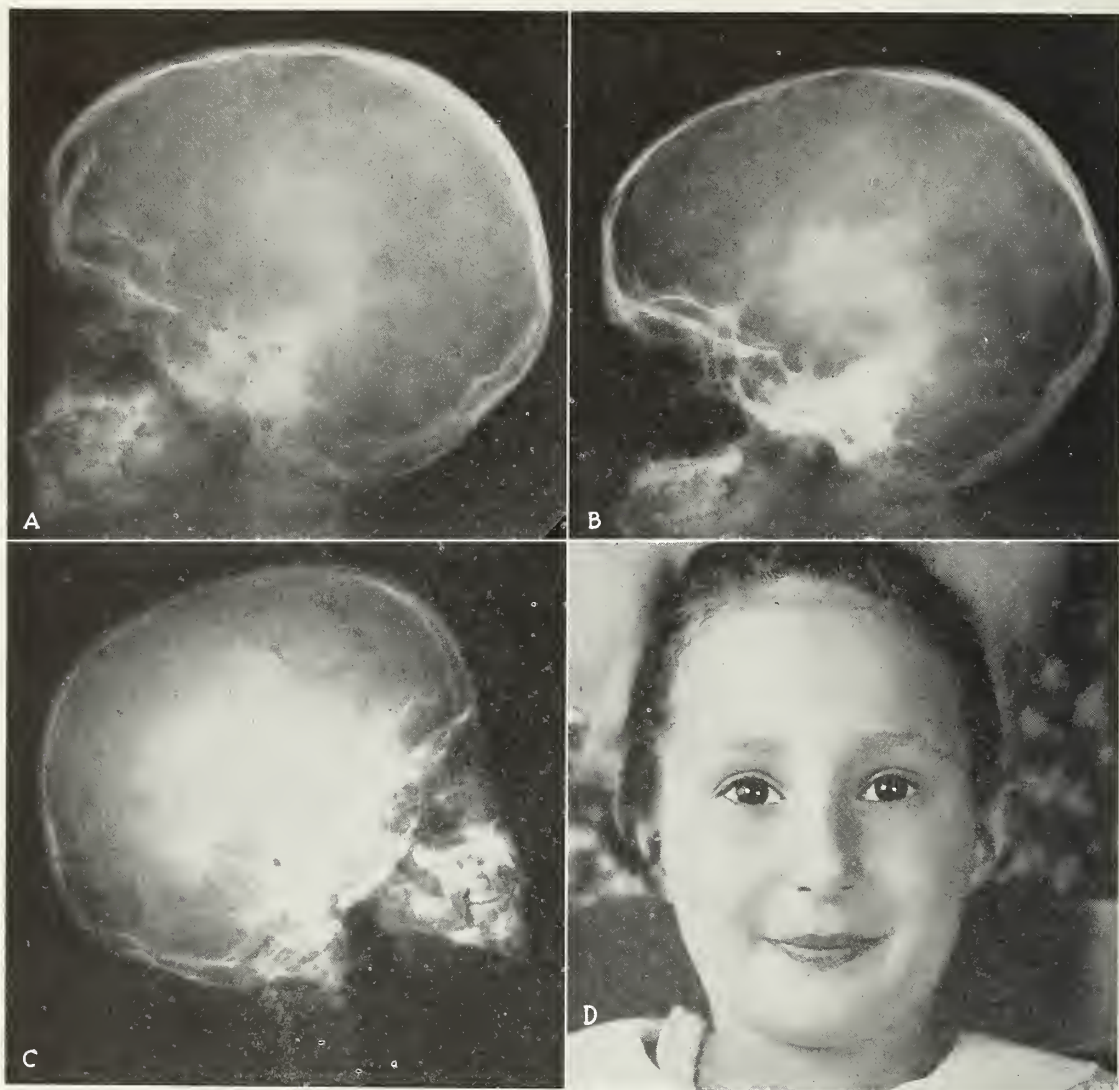


Plate I. *A* shows a compound depressed skull fracture of the mid forehead. Instead of rongeurizing it away the entire area of depression was elevated, as seen in *B*. *C* shows a compound comminuted depressed fracture of the right forehead region after repair. In *D* the end-result may be seen. The contour of the forehead is well retained.

crushed beyond plastic repair and careful work necessitates good exposure. Dural tears are sought for and repaired if possible; if not, packing of the area to hold the dura against the brain, as suggested by Peet, is excellent. The majority of these patients have to return at a later date for plastic repair.

Local anesthesia and in some cases block anesthesia is excellent. Installation of a few drops of 2 per cent novocain solution in the supra-orbital notch on both sides with some infiltration of the intervening area gives a large anesthetic skin surface for cases with forehead involvement. If the pathology extends a little more laterally branches of the auriculo-temporal nerve can also be infiltrat-

ed along the anterior aspect of the ear. Good pre-operative medication is very helpful and for this purpose I do not hesitate to use good doses of morphine and scopolamin.

Bullet Wounds

Bullet wounds of the skull and intracranial contents present a problem similar to that of compound fracture of the skull. Cases of bullet wound of the head may be grouped into two general classes. First, those with no fracture, and, second, those with fracture or perforation of the skull. The wound of the scalp among cases with no fracture of the skull may be, first, through and through, in which the bullet penetrates the scalp and travels a distance beneath it and makes its

exit at a different point; second, grazing wounds, in which the scalp is struck tangentially and a cut in the form of a furrow is thus obtained; and, third, puncture wounds in which a rounded and punched-out wound is present. The fact that there is no fracture of the skull does not eliminate a possible intracranial involvement. In one of our cases subdural hematoma complicated a gunshot wound of the head with no fracture or penetration of the skull. It must be admitted, however, that the greatest majority of cases with no fracture of the skull are asymptomatic and do very well indeed.

Among those with perforation or fracture of the skull there may be only a wound of entrance or there may be a wound of entrance and one of exit. When cases of bullet wound of the head with perforation of the skull are classified on the basis of their general course in the hospital, three groups are encountered: (1) Those who enter the hospital in a moribund state and die soon after; (2) those who look very ill and continue long enough to develop evidences of increased intracranial pressure (increased respirations, ascending temperature) and die within twenty-four to thirty-six hours; (3) those who look good irrespective of apparent trauma. It is this third group who deserve more of our attention. The management of gunshot wounds of the head is essentially the same as the management of compound fracture of the skull. There are some differences, namely, that the bullet may remain in the cranial cavity and that there is greater possibility of pieces of bone being dispersed through the brain in direct vicinity of the wound of entrance. The aim is prevention of intracerebral infection and to minimize post-traumatic sequelæ. The wound is debrided in the usual manner, all foreign particles and pieces of bone are removed, the softened and necrosed brain tissue is carefully sucked away and the wound is closed without drainage except in the region of the frontal sinus. When the bullet is lodged in the brain close to the wound of entrance, removal of same is desirable. However, if it is at a greater distance from its point of entrance, such as diagonally across in the opposite hemisphere, no attempt is made to remove it so long as the patient carries on satisfactorily. There are many in this group who carry a bullet in the head which apparently causes no dysfunction; however, we realize that, in a few cases,

post-traumatic sequelæ may not be evident for years. In some there may be eventual evidences which spell surgical intervention for removal of the bullet or a cyst surrounding it.

It is important to treat shock before any surgical intervention is effected. In some cases because of the precarious condition of the patient I have waited as long as thirty hours before operation was performed. The wound is closed without drainage. Careful and thorough debridement is necessary. At times the bullet forces in foreign particles, bits of clothing, hair, et cetera, into the brain. These should be removed with meticulous care.

In one of our cases the forcing in of bits of sheepskin coat collar by the fragments of a bullet was directly responsible for the saving of the patient's life. The bullet grazed the inferior aspect of the left lateral sinus, making a hole of one-half centimeter in diameter. Tufts of sheep hair were found plugging the hole and this undoubtedly averted fatal hemorrhage. The plugging of the hole in the sinus was helped to a great extent by the fragmentation and slight depression of bone fragments. After thorough cleansing, the opening in the sinus was closed with a large piece of muscle obtained from the patient's leg.

Stab and Other Penetrating Wounds of the Head

Penetration of the skull by knife blade, ice pick, glass, umbrella end, and by many other unusual tools or everyday utensils is possible. In one of our cases an ice pick entered the skull in the line of the sagittal suture and perforated the sagittal sinus.

In the management of penetrating wounds of the skull two important possibilities should be kept in mind: first, that such penetrating wounds may be through vascular channels of the cranium (sinuses, meningeal vessels, large dioloë); and, second, that there may be an introduction of infection. The majority of patients with penetrating wounds of the skull are surprisingly asymptomatic and it is only occasionally that intracranial hemorrhage due to tear or rupture of venous or arterial channels does obtain. Infection is seldom introduced into the cranial cavity. This may be partly explained by the fact that during the period of thrust any dirt on any object may be held back as it enters the scalp. It has been our experience that a careful cleansing of the wound of entrance, removal of the foreign body, if a portion of

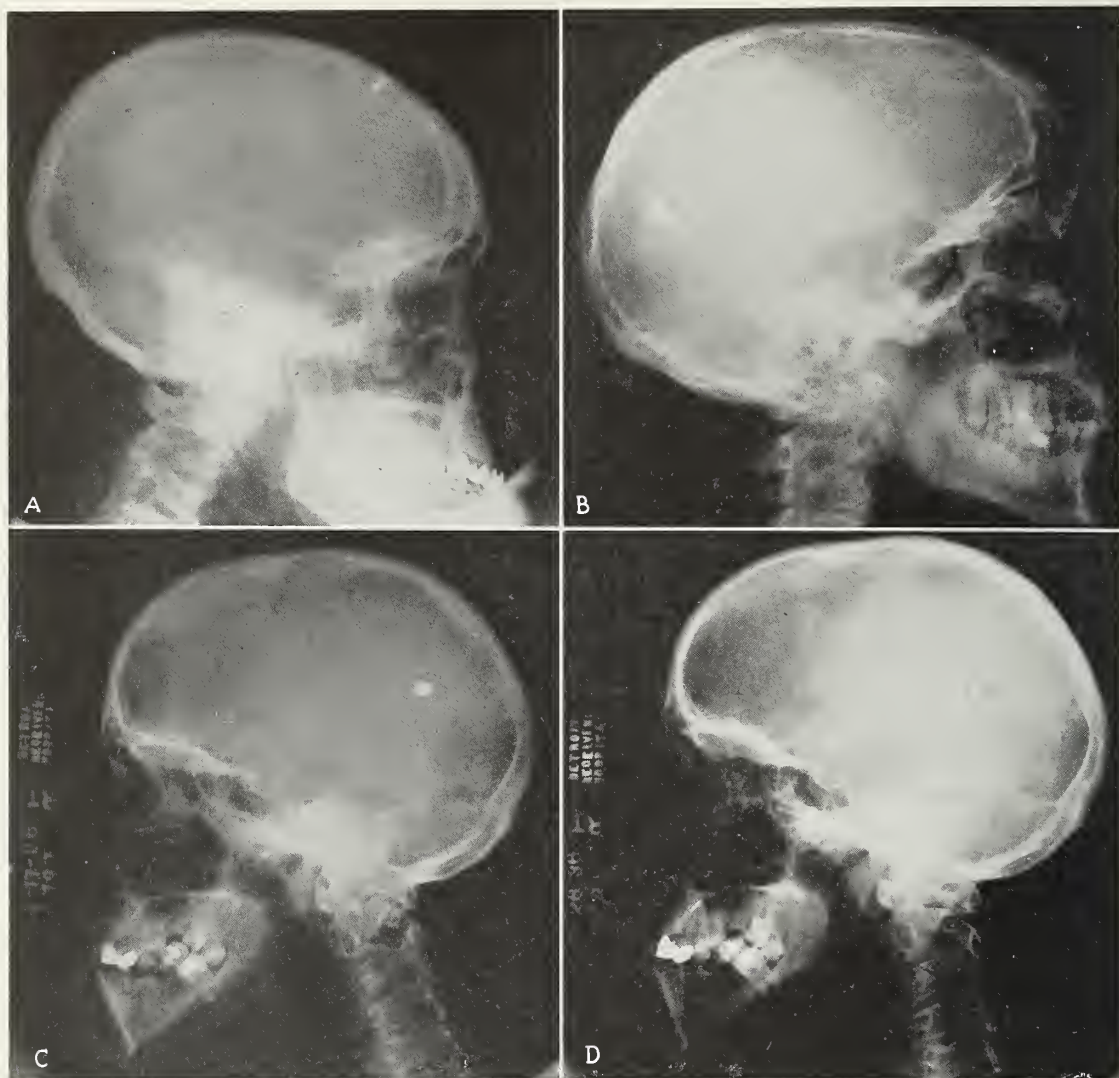


Plate II. *A* and *B* show the end of knife broken in the skull and cranial cavity. *C* and *D* show a method of treatment which saves the bone.

it still remains in the cranium, is usually sufficient to end the case. Where the penetrating object has already been completely removed by the patient or the assailant, probing except under strictly aseptic conditions is contra-indicated.

Where the end of a knife is broken off in the skull its removal becomes very simple by trephining and removing a button of bone surrounding the object. After removal of the object the button of bone may be replaced.

Summary

1. Prognosis for life in depressed fractures is best when the anterior third of the skull is involved. In this series the mortality is 8.5 per cent for anterior third, 23 per cent for middle third, and 40 per cent for

posterior third depressions. In the management of depressed fracture in portions of the skull not covered with hair the possibility of postoperative deformities should be kept in mind. A little pre-operative forethought is at times sufficient to obviate such sequelæ in the greatest majority.

2. Bullet, stab, and other penetrating wounds of the head are treated essentially in the same manner as any other compound fracture. It should be remembered that penetrating wounds may involve arterial and venous channels in the head, the early recognition and treatment of which may save the patient's life.

Bibliography

1. Crile, G. W.: Notes on military surgery, Cleveland Feather, 1924.
2. Cushing, H.: Brit. Med. Jour., 1:221, 1918.
3. Gurdjian, E. S.: Ann Surg., 102:89, 1935.
4. Peet, M. M.: Indust. Doctor, 5:7, 1927.

MATERNAL HEALTH ASPECTS OF COMPLICATIONS OF PREGNANCY

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As civilization advances it seems to increase the hazards of the reproductive function, and the responsibility which attends the management of the parturient woman is becoming progressively more exacting.

Physicians who are vitally interested in maternal health problems look forward to the day when the obstetric art will progress to such a degree of perfection that all women who become pregnant will find themselves in a satisfactory physical and mental condition, assured of an uncomplicated, uninterrupted and otherwise normal outcome. Furthermore, obstetricians visualize the time when all women in whom childbearing causes a serious hazard because of organic disease and other conditions, will be prevented from becoming pregnant by scientific and harmless and efficient contraceptive advice and treatment.

The writer believes that the medical profession is on the threshold of an intense awakening to the necessity of seriously undertaking to reduce the complications of pregnancy.

The general diseases incident to pregnancy, as has been observed by many physicians, are most likely to be disorders of those functions most concerned with gestation, such as the general metabolism, liver, kidneys, and blood. Examples of accidental diseases are tuberculosis and cardiac disease.

While such important complications as tuberculosis, heart disease and toxemia constitute only a small number of the ailments which may afflict the parturient woman, they furnish excellent examples of the necessity of safeguarding her even before conception occurs and of contributing to her maternal health, a service that will protect her during the antepartum, intrapartum, and postpartum phases.

The improvement of maternal health is a responsibility which rests upon the entire profession. Periodical physical examinations should be given to the entire public and particularly to adolescent and adult females. It is important that a prenuptial physical examination be made so that organic disease of the lungs and heart or any other pathology can be detected and evaluated in relation to the question of pregnancy. Following marriage every woman should be examined at stated intervals with reference to her reproductive possibilities, and just as soon as pregnancy is suspected she should place herself under obstetric supervision.

There is no branch of medicine more important and far reaching than that of improving the standards of maternal health in every community. The writer maintains that it is a community responsibility and obligation of the physicians in each county medical society to render to each expectant mother the highest degree of maternity service of which they as individuals and as a group are capable.

The remarkable advance which has been made in surgery and medicine, in both prevention and practice, are well known to all. But it is humiliating to obstetricians to realize that the oldest medical specialty occupies such an inferior position in the curricula of medical schools, in the estimation of the average practitioner and in the eyes of the public.

In spite of this, the writer is optimistic enough to believe that there are forces at work of national scope which, if mobilized intelligently, will result within the next quarter of a century in reducing maternal mortality and morbidity almost to a vanishing point.

Seventy-five per cent of the complications of pregnancy are considered preventable. How can the profession in any given state improve its maternity service and avoid these complications?

A national organization known as The American Committee on Maternal Health was incorporated in April, 1934. Part of its official purpose as stated in its by-laws is:

"To awaken and stimulate the interest of the members of the medical profession in cooperating with public and private agencies for the protection of the health of mothers and their offspring before and during pregnancy and labor and after confinement, to the end that the conditions which menace and interfere with the health and life of the mother or infant may be improved or prevented, and disease and disorder corrected and prevented, health promoted, and life saved; to teach the principles and

practices of general and personal hygiene and health to parents, to improve and generalize the standards and methods of training physicians and nurses and others dealing with the problems of maternity."

The National Committee desires to cooperate with all State Committees and County Society Committees that are in existence at the present time, and hopes to see in every State Medical Society, and in every County Medical Society an active Committee on Maternal Health.

Improvement in obstetric service can be attained by attacking the problem from three different important angles.

The practical training and experience of medical students must be increased by furnishing them with sufficient clinical material approaching the actual work which they will encounter in hospitals and homes and their offices when they enter actual practice. At the University of Michigan, as an example, the amount of clinical obstetrical material is far from adequate. I have been told by comparatively recent graduates from that institution that they participated in only two cases of delivery and observed only a small number of women in actual labor. The writer cannot too strongly recommend that the Michigan State Medical Society through its proper channels immediately take steps to increase the obstetrical clinical material at the University of Michigan. A better training of medical students in Obstetrics is fundamental and is one of the major considerations in suggesting a "New Deal" for expectant mothers.

The second attack must be an effort to give more postgraduate obstetric instruction, especially to older practitioners who live remote from larger medical centers. In this connection, postgraduate courses sponsored by the University of Michigan and the Michigan State Medical Society under the able directorship of Dr. J. D. Bruce are of inestimable value and in the field of obstetrics could be given more frequently than once a year with great advantage. One must bear in mind that the bulk of obstetrics in Michigan and elsewhere is being done by general practitioners many of whom have not had the opportunity of special training in that branch of work. The writer has learned from considerable experience in addressing medical groups on obstetric subjects that physicians are most anxious to improve themselves in this branch of their work.

A final attack must be directed toward

the education of the public as to what constitutes adequate maternal service and this, in the writer's opinion, is of very great importance. Every expectant mother is entitled to know the truth about the type of obstetric care she is about to receive and this can be done only by continuous instruction from the medical profession.

There always has been a wide gulf separating the lay public and the ethical and scientific medical profession. Upon that gulf have sailed and continue to sail the crafts of a diverse group of cults and irregular practitioners who pursue a livelihood by attempts to practice the healing art without sufficient training, without sufficient conscience, and without a proper perception of the responsibility involved. The public must be informed as to the competency of the individual who renders medical service and this information can only filter into the minds of the public by education and propaganda emanating from the medical profession itself. Therefore, in the field of maternal health particularly, those who are vitally interested must carry the message of better obstetrics to the public by informing them of what constitutes at least a minimum standard of maternal care, thereby advising them what service they should expect if they are to avoid many of the complications of pregnancy. This information should be given to the public by every means that is ethical, legitimate, honest and in good taste; it is as much needed in urban as in rural communities. The public must be reached by members of the medical profession through the medium of the speaking platform, the public press, radio and moving pictures. The crusade must be continued until proper maternal care is within the reach of every woman in every community and until the public realizes that good obstetrics is a good investment.

This is an urgent current problem which can be solved by the medical profession first putting its own house in order and then enlightening the public, who will, as a result, demand a correspondingly higher standard of obstetric service.

A complete maternal health service during pregnancy may at any time require consultative opinion from the various specialists such as the cardiologist or urologist or expert in pulmonary pathology and more particularly the physician who is well trained in operative obstetrics. The lack of proper

consultation in obstetrics is responsible for much of the mortality and morbidity which at the present time are associated with maternity work.

Many women are permitted to give birth to a child or two in spite of certain complications which either antedate or occur during pregnancy, and the writer believes that when such questions arise advice given constitutes one of the most important problems and responsibilities in the field of maternal health. It requires discriminating judgment to decide for an expectant mother what course to pursue in the face of complications actual or anticipated.

Physicians who do obstetrical work assume a dual responsibility even in the normal case; but they are faced with tremendous problems when serious complications arise. If they view these problems from a broad and conscientious maternal standpoint it will be necessary for them to determine such questions for the married woman as: first, the advisability of endeavoring to have a family; second, the interlude between pregnancies; third, adequate and harmless contraceptive treatment particularly in cases where serious complications are present; fourth, the prevention of complications during pregnancy; fifth, the conservative treatment of complications that cannot be prevented; sixth, the safest way to interrupt pregnancy if it becomes necessary; seventh, the conduct of labor in cases where in spite of complications the pregnancy continues to full term.

Many other problems present themselves in the field of maternal health which should constantly remind the physician of the importance and gravity of his responsibilities.

It may be of interest to review some of the activities of the Committee on Maternal Health of the Michigan State Medical Society appointed by President Penberthy for service during the present year. The most important project initiated was an obstetric survey for the purpose of ascertaining the type of obstetric work being done

in the State at the present time. The survey blanks were prepared after a great deal of deliberation and at the present time they are in the hands of all physicians in the State who do obstetric work. The physicians were requested to fill out a blank for each case they delivered during the months of January, February and March, 1936. The Committee endeavored to prepare these blanks so that the questions would be sufficiently easy to answer and so that the answers would be informative and practical.

In this work the committee was assisted by the United States Public Health Service, which organization will complete the statistical work. The success of the survey will depend entirely upon the thorough way in which the individual physicians reply. We believe that a careful analysis of this survey will be of great assistance to us all in improving the standard of maternal health in every part of our commonwealth.

Realizing that this survey could be better accomplished by the appointment of maternal health committees in all counties, the State Committee suggested that the presidents of all county societies appoint a committee on maternal health. At the present time over fifty committees have been appointed whose functions it will be to deal with all local conditions relating to maternal health.

The committee, through the financial support of the Michigan State Board of Health, has supervised the making of a prenatal movie for presentation before lay audiences. It has also arranged to furnish medical speakers throughout the state to discuss maternal health problems, and some lectures have already been given.

The writer believes that the dovetailing efforts of the National, State and County Society Committees on Maternal Health will, in due time, have such a profound influence on the profession and on the public that they will result in greatly reducing the complications and hazards associated with pregnancy.



LIQUIDATING YOUR PRACTICE

By ALLISON E. SKAGGS, and HENRY C. BLACK

IN previous articles we have attempted to outline briefly some of the simple fundamentals of good business procedure as they relate to medical practice. In continuing, we propose to discuss some of the more intricate business problems which frequently arise, and to which the best solutions are less clearly defined. It is not our intention, in any way, to represent ourselves as an authority on these subjects; on the contrary, we feel that we will have accomplished much if we are successful in pointing out the pitfalls that we have observed and show the way to eliminate some of them.

While most doctors have made their will, comparatively few leave any definite instructions as to the method to be used in liquidating the practice in the event of their death. Any doctor who has had the unfortunate task of trying to straighten out the affairs of one of his deceased colleagues would certainly take the comparatively short time necessary, in his own case, to record *all in one place* that information which is not only valuable to him, but invaluable to anyone else who by necessity is forced to step in and take charge of liquidating his estate.

The plight of the doctor's widow, still suffering from the shock of her loss, without accurate records of property values or liens against them, and trying to follow the well-meaning but varied advice of a dozen relatives and friends, is sad indeed and entirely unnecessary. Either as a part of the will or accompanying it should be definite instructions as to the sale of the practice, including drugs and equipment, and the liquidation of outstanding patients' accounts, as both will bring a much higher return immediately than after months of indecision.

Liquidation of Accounts

Although the complete liquidation of patients' accounts will necessarily drag along for months and even years, prompt action in sending out statements and correspondence requesting definite arrangements for settlement will multiply by many times the amount that may eventually be collected

from them. The regular monthly follow-up of all accounts is a routine the value of which is obvious, and if this correspondence is repeatedly ignored the services of a local bonded collection agency are indicated.

Sale of Practice

The sale of a "going concern" always brings more money than the equipment will bring for its salvage value, so naturally the practice should be sold as a unit, if possible, to a new man who would appreciate the initial advantage of continuing a practice rather than having to start a new one. Often drug or equipment salesmen know of young doctors looking for just such openings and can be of great help. Prompt action is, of course, imperative if such a sale is to be made before the patients form the habit of turning elsewhere for medical care.

Sale of Drugs and Equipment

Where sale of the practice as such has been for some reason impossible, the only thing left is to sell the drugs and equipment to whoever will buy for whatever they will pay, and again some of the more substantial drug and equipment salesmen can and usually will help out by selling these things at a fair price, less their commission, to various doctors of their acquaintances who they know have use for them. Usually the money received from such sales is disappointing as compared to the original purchase price, but this is to be expected.

Competent Advisors

Since, to get the best results, many of these ideas must be carried out without delay it is well to specify along with the will that the doctor's widow may look to some trusted friend for immediate advice in carrying out these imperative details. Possibly it may be a business man, an experienced office girl, or a fellow practitioner whose business judgment is sound, but the essential thing is that the instructions specify in detail just what you would have done, how and by whom. A competent attorney, preferably the one drawing up the will or instructions, should also be consulted as to the legal

(Continued on page 780)

THE JOURNAL

OF THE

Michigan State Medical Society

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OCTOBER, 1937

*"Every man owes some of his time to the up-
 building of the profession to which he belongs."*

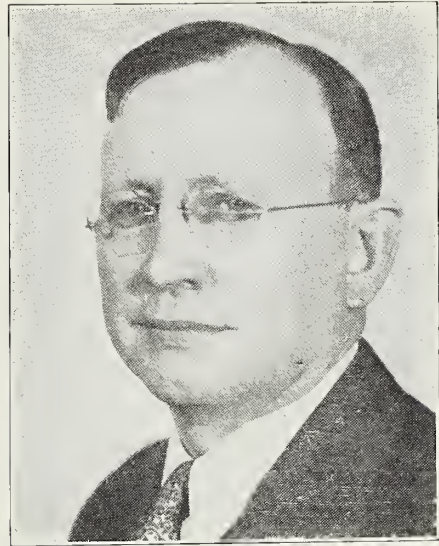
—THEODORE ROOSEVELT.

EDITORIAL

THE PRESIDENT

Dr. Henry Cook of Flint becomes president of the Michigan State Medical Society for the year 1937-38 by virtue of having been elected president-elect by the House of Delegates a year ago, and Dr. Henry A. Luce has been elected to the position of president-elect. Dr. Cook comes to the office well grounded in the requirements of the position. He has served 10 years as councillor of the sixth district and, following the late Dr. Julius Powers, he held the position of chairman of the council until a year ago, when, as president-elect, he was succeeded as chairman of the council by Dr. Paul Urmston. Dr. Cook has given unstintedly of his time and ability in the interests of the Michigan State Medical Society. Following his graduation from the Detroit College of Medicine twenty-eight years ago, he located in Flint, which was fast becoming one of the great automobile centers of

American. Dr. Cook has not only served his profession in an executive way, he has also served his city in a civic way. He has taken



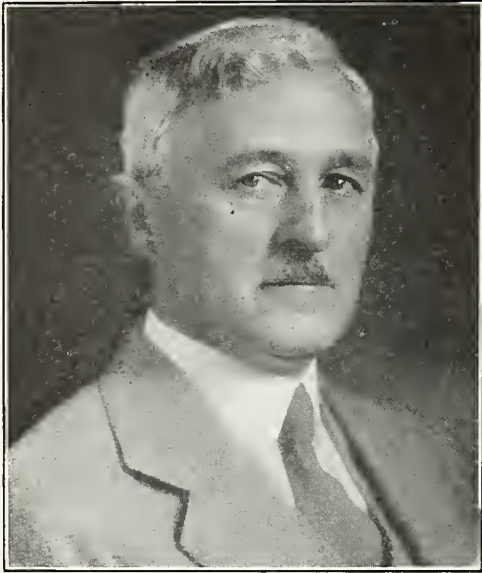
HENRY COOK, Flint
 President

an active interest in local education, where he has been a member of the school board and chairman as well.

Dr. H. A. Luce has had a long and intensive experience in medical affairs. He was president of the Wayne County Medical Society in 1925 and 1926. To the Michigan State Medical Society, he was a delegate for ten years, and was speaker of the House of Delegates in 1934 and 1935. He is delegate from Michigan to the House of Delegates of the American Medical Association for the fourth term. He has practiced in Detroit as a general practitioner for thirty-two years, and more recently he has limited his work to neurology and psychiatry. The Society is to be congratulated on the election by acclamation of Dr. Luce.

The presidency of the Michigan State Medical Society of recent years has come to be almost a full time occupation. Until less than a decade ago, the president of the state medical society was chosen by the membership at large, when the position was bestowed upon some venerable member the profession wished to honor. It was, therefore, largely an honorary position. The trend in medicine within recent years has demanded that the chief official be specially trained, which was happily effected by the year's probation of president-elect. The per-

son so chosen must look upon his year of office as a sabbatical year from his practice, except that it comes once in a lifetime instead of once in seven years. Presidents in



HENRY A. LUCE, Detroit
President-Elect

the immediate past have so viewed it. Dr. Perry took up a temporary residence at Lansing during the legislative session when so much legislation that had a bearing on medicine was being considered. The successful efforts towards the consolidation of Michigan Medicine were accomplished in many ways: one, the moving of the executive office to Lansing and the employment of a full time executive secretary; another, the holding of so-called "state nights" when the president and officers of the Michigan State Medical Society got together as the guests of many of the larger county medical societies for a social and business evening. However, it was all worth while, for it promoted a spirit of unity of the Michigan profession, a team spirit which has been productive of worthwhile results.

THE PASSING OF A GREAT MEDICAL EDITOR

SINCE going to press with the September number of this JOURNAL, news has reached us of the death of Dr. George H. Simmons, one-time editor and general manager of *The Journal of the American Medical Association*. The younger, or should we say

youngest, generation is doubtless not very familiar with the services of Dr. Simmons to the medical profession of the United States. When a prominent person passes off the scene, too often he is apt to be forgotten or, perhaps better, not remembered as he should be by the younger generation, so swiftly do things move in this transitional age.

Probably more than anyone else, Dr. Simmons deserves credit for the present highly organized and efficient American Medical Association. His early life was spent in England, where he was born eighty-five years ago. He came to the United States while a young man and received his medical education in this country. Dr. Simmons showed every indication of editorial ability early in life. Before entering upon the study of medicine, he was active editor of the *Nebraska Farmer* and assistant city editor of the *Nebraska State Journal* as well as field correspondent of the *Omaha Republican* and the *Kansas City Journal*. Probably, there is no other kind of schooling that enables one to express his thoughts on paper with clarity and force equal to the education afforded by a few years in daily newspaper work. Such was the preliminary training with which Simmons entered the field of medicine.

In 1899, the board of trustees of the American Medical Association looked about for a secretary for the organization and editor for its periodicals. A number of strongly endorsed applicants sought the position. Dr. George H. Simmons was finally selected for the position of general secretary of the American Medical Association, which he held from 1899 to 1911, and editor, which position he occupied until 1924, when he resigned. In 1901, he became general manager of the Association. It is a long and interesting story which we will not relate; suffice that Dr. Simmons was greatly instrumental in the re-organization of the American Medical Association which took place in 1901. *The Journal of the American Medical Association* was established in 1883. When Dr. Simmons took over the supervision and management, the subscription list was about 10,000. From that time, the *Journal* has grown in number of subscribers and members, and consequently in influence. Simmons initiated a fearless crusade against quackery, which is well-known to the doctors of a generation ago. Since the re-organiza-

tion of the Association, new duties have been added, the council on medical education and hospitals in 1905, later the Council on Pharmacy and Chemistry, the American Medical Directory and various specialist publications, such as the *Archives of Internal Medicine*, *Neurology and Psychiatry*, *Dermatology and Syphilology*, and of *Surgery*. To him also must be accredited the initiation of a quarterly cumulative index of leading medical publications which was later to be combined with the *Index Medicus* into the *Quarterly Cumulative Index Medicus*. *Hygeia* also appeared while Dr. Simmons was editor and general manager of the *Journal*.

His personal writings were few, we are told. This statement, doubtless, has reference to set essays or monographs. However, the amount of actual writing which an editor performs, which is published anonymously from week to week or month to month, as the case may be, in a few years is simply enormous.

Dr. Simmons, as noted, retired in 1924 at the age of seventy-two. Since that time, he had lived a well rounded life. His passing removes from the profession a personality full of years of service. The debt of gratitude of the medical profession, to him, is very great.

SILICOSIS

SILICOSIS has come into the limelight with the enactment of the Michigan Occupational Diseases Law. Not that the condition is so wide spread or that disabling cases are so numerous; its importance at the present time has a legal rather than clinical significance. Should an apparently healthy man be deprived of his means of earning a livelihood? Should an employer assume the risk of thousands of dollars in the event of a silicotic person contracting pulmonary disease?

What is silicosis? "Silicosis is a disease due to breathing air containing silica, characterized anatomically by generalized fibrotic

changes and the development of miliary nodulation in both lungs, and clinically by shortness of breath, decreased chest expansion, lessened capacity for work, absence of fever, increased susceptibility to tuberculosis, and by characteristic x-ray findings." So runs the definition of the Committee on Pneumoconiosis of the Industrial Hygiene Section of the American Public Health Association. According to Ling,* "The important symptom (of silicosis) is a gradual development of shortness of breath on comparatively slight exertion, accompanied by a dry cough; as the fibrosis increases, the dyspnea becomes intensified and the affected person is not only unable to resist comparatively slight pulmonary infections, but is also very prone to the development of active tuberculosis." Silicosis is then the result of inhalation of air laden with particles of silica fine enough to enter the smallest air spaces of the lungs. It is believed that toxic substances inhaled are much more dangerous than when absorbed through the intestinal tract. In other words, owing to the detoxicating work of the liver, substances absorbed through the alimentary tract are less harmful than the same substances inhaled.

Industrial medicine has been long aware of hazards of occupation and precautions have already been taken in the way of prevention. The well lighted and well ventilated industrial plants are evidence of the efforts of industrialists to guard the health of their employees. Grinding operations, as a rule, must be performed under running water or oil as the case may be. Special suction fans carry off dangerous fumes. It is the duty of industrial hygienists to see that continued efforts are directed towards diminishing health hazards surrounding certain industries. The Occupational Disease Law will have the effect of accelerating efforts in this direction. It will also make more stringent the selection of workers in various industries. Physicians, whose duty it is to examine employees and prospective employees, will be called upon to assume a responsibility that must not be lightly undertaken.

*Ling, T. M.: Recent Advances in Industrial Hygiene and Medicine.



The Editor's Easy Chair

READING

Many centuries ago an inspired writer said, "Of making many books there is no end," and he also supplemented the statement with the remark that, "Much study is a weariness of the flesh." One wonders what Solomon would say if he were alive today. While books appear during almost every month of the year, autumn is the time when the majority of new books appear.

In order to be at all conversant with pressing problems of the day, one requires to devote considerable time to reading. Many confine their reading to current magazines; more read simply pocket-sized digests of current magazines. I believe that most doctors are slow readers. The reader of scientific literature is almost invariably a slow reader, inasmuch as he acquires through years of study the habit of weighing each sentence or paragraph. He must do this, otherwise he accomplishes nothing. The slow reading habit, however, is absolutely out of place when it comes to the perusal of works of fiction. To read "Gone with the Wind" or "Anthony Adverse" as one would an Osler's Practice or a work on pathology would be a sheer waste of time. We know of very few doctors who have read either of those works of fiction. For the sake of covering greater quantities of fiction, I am not advocating a change in habit that has stood one well during his student and later years in medicine. The physician in reading medical literature does not often begin at the opening chapter of a book to continue through to the end, unless the book is a monograph on some phase of a subject in which he happens for the moment to be interested. He is more apt to use his library as a means of enlightenment on some particular subject, much as he would resort to a dictionary to look up an obscure word. Medical journals are usually read selectively. Some have the habit of removing articles from their medical journals and filing them for future perusal.

Reading may be used as a means of recreation. Recreation is largely an affair of the mind anyway. Mere exercise is not recreation. Were it so, why a vacation for those already engaged in non-sedentary occupations? One may experience a change of scene by means of a book as well as a change of scene by travel. Variety or diversity may be had by reading several books at a time. This, of course, does not mean glancing from one to another until one has covered four or five; with a little practice, one may read a chapter or three or four chapters in one evening and conveniently turn to a different work the following evening, to return to the first volume at some other convenient time. He will have the same experience as he would in the company of different friends at different times. Sometimes a book will hold one if it is not too long until he reaches the end. Sometimes a change to several books in one evening will be found most restful and satisfactory.

No matter what one's occupation (this, however, is for medical readers) there are certain pressing subjects as mentioned, outside of medicine, about which the intelligent doctor must inform himself. We do not see how anyone with any pretense to intelligence can afford to neglect the political situation. The basic philosophy of current politics is probably studied to better advantage in some of the more thoughtful magazines such as the *Yale Review*, or *Harpers*, *The Atlantic* or *Forum* or other journals of opinion. The foreign situation is also another subject. The radio and airplane have knit the whole world into a large community. And then there is the subject of socialism, so generally opposed by almost all of us. A clear knowledge of socialism should be sought if one is to be an intelligent critic.

Then there is biography. A biography well written makes for interesting reading almost regardless of the subject. Carlyle once said in his biography of the rather obscure and prosaic John Sterling, "A true delineation of the smallest man and his scene of pilgrimage through life is capable of interesting the greatest man; each man's life is a strange emblem of every man, and human portraits faithfully drawn are of all pictures the welcomest on human walls." The present day is particularly rich in biog-

raphies. Many interesting lives of prominent personages of the immediate and more remote past have been made the subjects of research—great characters described by great biographers. Apart from medicine, we would like to suggest "The Flowering of New England," by Van Wyck Brooks, as being one of the most interesting accounts of the lives of prominent New Englanders, chiefly literary personages of the early part of the last century. Many works can be recommended of this kind of literature. Medical history, almost any volume, deals similarly with the careers of the makers of medicine.

Then there is history. I have spoken of the importance of philosophical approach to politics. Much of the recently written history of the United States, as well as England and other countries, has been of a debunking (terrible word) nature. However, instead of idealizing the past, we have what may be termed a realistic conception of history so necessary for an intelligent interpretation of present day events. A study of history will make us more charitable towards present day tendencies. There is nothing very new, or very different from some period in the past, only a "sea change," so to speak. In making such a statement, it is difficult to be specific. Its truth in a general way will be realized by the reader of history.

So much is there to read that one must very deliberately decide what not to read, or, in other words, he must aim at a wise selection.

End Results in Fractures of the Shaft of the Femur

ELDRIDGE L. ELIASON and JOHN PAUL NORTH, Philadelphia (*Journal A. M. A.*, Sept. 11, 1937), discuss a consecutive series of seventy-four cases of fracture of the shaft of the femur, of which 81 per cent have been followed, so that the ultimate anatomic and functional results are known. The study presents the results of treatment by numerous surgeons, since, in addition to two chiefs, fifteen assistant surgeons were concerned with the management of these patients. It is not a series selected to illustrate the results of any one method of treatment, as a variety of methods are employed. The cases were all fractures of the shaft proper. Consideration is given only to cases admitted to the hospital within one week of the injury and to those in which the fracture occurred through normal bone. Of the seventy-four patients, twenty-four were more than 16 years of age. 1. The emphasis in fracture therapy should be on restitution of function. 2. In fractures of the femoral shaft, perfect anatomic reduction is not necessary for normal function of the limb. 3. Simple closed methods of treatment

will give good results in this fracture, provided fundamental principles are respected. 4. Of the several methods of traction employed, that of adhesive tape on the thigh was least effective in producing satisfactory reduction of the fragments. It had to be displaced by other means in all but 13 per cent of children and 11 per cent of adults. Skeletal traction, on the other hand, proved satisfactory in 67 and 62 per cent respectively. Russell and Bryant traction were each effective in 41 per cent of cases in children, although in adults the Russell traction fulfilled the surgeon's requirements in only 25 per cent of patients. 5. Length and alignment should be obtained to assure an ultimately good result. Shortening of the limb is apt to be permanent even in children. 6. Whereas in this series there were 92 per cent of perfect function results in children, only 64 per cent of adults escaped disability. The disappointing results in the latter are largely due to the permanence of shortening, stiffness of the knee from prolonged immobilization and the unsatisfactory results of operative reduction.

Incidence of Operations for Goiter in Southern Michigan: Effect of Iodized Salt after Twelve Years' General Use

ROY D. MCCLURE, Detroit (*Journal A. M. A.*, Sept. 4, 1937), states that through coöperation of the Michigan State Medical Society, the state board of health, Dr. O. P. Kimball and the salt manufacturers, iodized salt was introduced in 1924 through the grocery stores without any legislation. Iodized salt as used in Michigan did at first apparently increase the number of thyroid operations. The increase occurred in the nodular goiter or adenoma group. The iodized salt may have activated a group of patients with quiescent adenomas, producing toxic goiter symptoms. The increase reached its peak in the second year after the introduction of iodized salt. An increase in the death rate from goiter as shown by the board of health statistics reached its peak in the second year after the introduction of iodized salt. There was no increase in hyperthyroidism excepting in the nodular goiter or adenoma group. The number of operations for toxic diffuse and toxic nodular goiter has rapidly and steadily decreased after the apex of the second year excepting for a slight increase during the last three years. The incidence of endemic goiter or enlarged thyroid has been reduced almost to nil since iodized salt has been so widely used. No cases are now seen which show the slightest ill effects from the use of iodized salt. Toxic nodular goiter and toxic diffuse goiter are less apt to occur when there has been no previous enlargement of the thyroid (endemic goiter); at least this would seem a safe conclusion based on the experience in Michigan. As the publicity concerning the necessity for the use of iodized salt has fallen off, the sales of iodized salt have decreased until today one of the larger retail dealers in Detroit sells only about 50 per cent of iodized salt. Others range in sales up to 75 per cent, while the average is 75 per cent. The result of this delinquency is shown by a slight rise in the number of goiters in school children and in operating rooms. To combat this slump, continued publicity must be given to this subject, or should a law be passed making it mandatory for grocers to sell only iodized salt?

Serious

Doctor: "Well, madam, what is your ailment?"

Old Lady: "Pains in my arms, doctor. I can hardly lift them over my head, and it's the same with my legs."

DEPARTMENT OF SOCIETY ACTIVITY

L. FERNALD FOSTER, M.D., Secretary

Council Chairman's

- - - Communication

ECONOMIC DUTY

It is necessary that we again invite to your attention the Post Payment Plan.

Changes made in the welfare laws as passed by the last Legislature which affect the Crippled and Afflicted Child Acts, have had a tendency to break down the Filter System.

The *economic filter* is lax due to the fact that the superintendents of the poor are to be abolished.

Reports from various centers prove that the old system (in vogue previous to the Filter System) is being re-established.

It is advisable that the Medical Filter Board in each county check the economic status by explaining the Post Payment Plan and insisting that the indigent try to be self supporting.

By this plan physicians will retain the confidence of their patients and the public; also, the encroachments of lay organization in medical matters will be curbed.

It is your duty to your patients, to organized medicine, and to yourself to encourage the Post Payment Plan in your community.

P. R. URMSTON, M.D.,
Chairman of the Council.

THE ANTENUPTIAL PHYSICAL EXAMINATION ACT

WITH the operation of the Antenuptial Examination Act, which will bring 90,000 patients a year into the physicians' offices of Michigan, a powerful blow will be dealt venereal diseases. When this Act becomes effective, the State Department of Health will have provided necessary forms upon which to make the necessary reports. These reports, made upon

all applicants for marriage licenses, must be filed by all classes of society—from the economically secure to the indigent.

It becomes the duty of the medical profession to conscientiously make these examinations and reports. They should be executed in such a way as to work a hardship upon no applicant. This Act paves the way for an educational campaign, developing the idea of an Annual Health Inventory or Periodic Health Examination and at the same time enhances the vigorous campaign already begun by the Michigan State Medical Society for the eradication of venereal diseases in Michigan.

DELINQUENT MEMBERS NOT PROTECTED BY MEDICO-LEGAL DEFENSE

The Council of the Michigan State Medical Society, at its meeting of August 11, discussed the problem of the obligation of the State Society for defense of alleged malpractice suits when the Michigan State Medical Society accepts dues from delinquent members against whom such claims arose while the member was in arrears. Legal opinions were presented and studied. As a result, the council decided that, when a delinquent member pays dues to the State Society, the society shall not accept the amount payable to the medico-legal defense fund, for the period of time the member was delinquent, but shall return same to the member with an explanatory letter.

This action is effective as of the date of its promulgation, October 10, 1937.

The By-Laws of the Michigan State Medical Society are very specific in the matter of annual dues. Chapter 8, Sec. 2, reads as follows: "Any member in arrears after April 1 of each official year shall stand suspended until his name is properly recorded and his dues for the current year properly remitted."

THE FILTER SYSTEM

WITH a mounting case-load of afflicted and crippled children, we hear statements to the effect that the Medical Filter Boards are "laying down," not "breaking down," however. This is a situation which again emphasizes the fact that adequate medical filtering, which exists in most counties, must be preceded by efficient and adequate economic filtering.

Rising case-loads are ever charged to the medical profession, but the facts do not bear out these charges. The Economic Filter, which is a function of governmental agencies, is, in the vast majority of instances, directly responsible for mounting case-loads.

When Judges of Probate, Poor Commissioners and other public officials ignore the Filter System, the medical profession can no longer be charged with any abuses arising within the system. In order to place

the responsibility where it belongs for increased public costs, due to an increase in state cases under the Afflicted and Crippled Child Act, it behooves the Medical Filter Board, in every county, to check the Economic Filter Board and report specifically those cases which, through inefficient and inadequate financial investigation, have been made state charges.

Repeated checks on cases in various counties have proven that few medical and surgical cases have been treated for non-urgent and unnecessary conditions. The same checks, however, have definitely disclosed that many undeserving persons have been objects of state aid through a "break down" in the Economic Filters.

It is the profession's responsibility to prevent the "break down" of Economic Filtering, by reporting these conditions—but to do it there can be no "lay down."

AFFLICTED CHILD LAW

THE 1937 Legislature amended the Afflicted Child Law to remove several ambiguities and make the Act more practical in its workings.

For the information of the members of the Michigan State Medical Society, the new law (Act. No. 217 of 1937) is printed herewith in full:

The People of the State of Michigan enact:

Section 1. Sections one, two, two-a, three, four, five, six and seven of act number two hundred seventy-four of the public acts of nineteen hundred thirteen, entitled as amended "An act to provide for the medical and surgical treatment of children who are afflicted with a curable malady or are pregnant, and whose parents are unable to provide proper treatment, providing for the expenses thereof, and prescribing the jurisdiction of the probate court and the Michigan crippled children commission in such cases," as amended and added by act number two hundred forty-eight of the public acts of nineteen hundred thirty-three, act number five of the public acts of the first extra session of nineteen hundred thirty-four, and act numbers ninety-four and two hundred eight of the public acts of nineteen hundred thirty-five, being sections twelve thousand eight hundred eighty-nine, twelve thousand eight hundred ninety, twelve thousand eight hundred ninety-one, twelve thousand eight hundred ninety-two, twelve thousand eight hundred ninety-three, twelve thousand eight hundred ninety-four and twelve thousand eight hundred ninety-five, respectively, of the compiled laws of nineteen hundred twenty-nine, are hereby amended and three new sections are hereby added to said act to stand as sections eight, nine and ten thereof, said amended and added sections to read as follows:

Sec. 1. (a) Any child below the age of twenty-one years, married or unmarried, whose parent or guardian has resided in this state for one year, and who is afflicted with a malady, including acute fracture which can be remedied or is pregnant, except a crippled child as defined by the crippled children's act, shall, for the purposes of this act, be deemed to be an "afflicted child."

(b) Whenever any official or employee of the state department of public assistance or of any county department of public welfare, township supervisor, city physician, public health officer, or physician, shall find within his county any afflicted child as herein defined whose parents or guardians are officially determined by the probate judge to be unable to provide proper care and treatment, in whole or in part, it shall be his duty to provide for such care and treatment in the child's home if possible at local expense; and if such treatment cannot be provided, it shall be his duty to make a report of such condition on blank forms prescribed by the Michigan crippled children commission, hereinafter referred to as the commission, to the probate judge of the county in which such child resides. Compensation for such services shall be paid by the state of Michigan according to rates and fees fixed as herein provided. Upon the filing of such a report with the judge of probate, said judge may require a medical examination of such child and make such an investigation as he may deem necessary to determine whether such child needs treatment at home or in a hospital, and whether such treatment must be had at public expense.

SOCIETY ACTIVITY

Sec. 2. If upon investigation the judge of probate is satisfied that such child is an afflicted child as defined in this act and that the parents or guardians are unable to provide proper medical or surgical treatment, and the physician making the examination shall certify in writing that, in his opinion the malady is of such a nature that it can be remedied and that treatment cannot be given in the home at local expense, the judge of probate may enter an order directing that said child be conveyed for treatment to any approved hospital in the state. Such hospital shall have been approved by the commission as having met the requirements of the American College of Surgeons in regard to written hospital reports and having complied with the commission's requirements as to fire hazards. No such afflicted child shall be sent to or received into said hospital unless in the judgment of the physician in charge of such afflicted child there is a reasonable chance for him to be benefited by the proposed medical or surgical treatment, and as an aid to diagnosis and treatment of such case a complete history of each case shall be furnished to the hospital by the examining physician upon request. No crippled child as defined by the crippled children's act shall be committed to any hospital under this act. Copies of all investigational reports, financial findings and court orders shall be mailed by the court at once to the commission under the rules and regulations provided for in this act.

Sec. 2a. No child shall be committed to any hospital for medical or surgical treatment under this act until the parents or guardian of said child have entered into an agreement with the probate judge that they will repay, if they have been judicially determined to be financially able to do so, the state of Michigan for actual cost of such medical or surgical treatment on such terms as shall meet the approval of the probate judge. Payment of such cost by such parents or guardians shall be made to the probate judge in accordance with his order and shall be forwarded to the treasurer of the state of Michigan, paid into the general fund, and credited to the cost of the care of afflicted children under this act.

Sec. 3. It shall be the duty of the superintendent of the said hospital, upon receiving such child, to provide for such child clinical service or a bed, or room in the hospital. He shall also designate the clinic of the hospital to which the patient shall be assigned for the treatment of the malady in each particular case and the care and treatment to be given such child, except where such child is under the care of a private physician or surgeon. The physician or surgeon in charge shall proceed as promptly as deemed necessary to perform such operation and bestow such treatment upon such child as in his judgment shall be proper. The superintendent shall at once notify the commission who in turn shall notify the auditor general of the date of the child's entrance into such hospital together with a statement of the diagnosis.

Sec. 4. No compensation shall be charged or allowed to the admitting physician at said hospital or to any physician, surgeon, or nurse who shall attend or treat any such child at the hospital of the university of the state of Michigan other than the salary or compensation paid to such person by the admitting hospital. Any physician or surgeon treating any such child at any hospital other than the hospital of the university of Michigan may be allowed reasonable compensation as fixed by the commission and the auditor general, and shall be paid by separate warrant drawn to his order and delivered through the hospital as hereinafter provided. The cost of transportation of such child to and from such hospital shall be paid by the county in which such child resides or from which said child was admitted, and it shall be the duty of the county treasurer to pay such transportation expense out of the general fund of the county upon receipt of the proper certificate of approval thereof from the probate court or the commission.

Sec. 5. The superintendent of the hospital shall keep a correct account of the costs of professional and hospital services and necessities furnished to said child, and shall make and file with the auditor general an affidavit containing an itemized statement of such costs incurred at said hospital in the treatment, nursing and care of said child in accordance with the rates and fees fixed by the auditor general and the commission: *Provided*, That hospital rates shall not exceed a maximum for all hospital services and materials of four dollars and fifty cents per day and for professional fees shall not exceed seventy-five dollars for a major operation and two hundred dollars per patient during any one year.

Sec. 6. Upon filing such affidavit with the auditor general, it shall be the duty of said auditor general forthwith to draw an order on the treasurer of the state of Michigan for the amount of such costs, and forward the same to such hospital: *Provided*, That no crippled child as defined by the crippled children's act shall be entitled to free care to be paid for by the state under this act.

Sec. 7. The commission shall have power, hereby conferred, to administer this act, and to adopt rules and regulations to carry out its provisions. Said commission in coöperation with the auditor general shall fix a reasonable uniform schedule of compensation to be paid to any agent, officer or person, or to any hospital, physician or surgeon, to investigate, examine or care for legally admitted children, for their clinical examination, and/or treatment and hospital maintenance. Such uniform schedule of compensation rates and fees shall be established by the commission in coöperation with the auditor general on the first day of March and on the first day of September of each year, and at such other times as may be necessary; and such schedule shall be published promptly by the commission: *Provided*, That no person in the employ of the state or any county shall be allowed any compensation or traveling expense other than that provided by law, for such transportation in addition to actual traveling expenses. All claims for compensation shall be itemized for each child and rendered monthly under oath to the auditor general. When such claims are audited and

SOCIETY ACTIVITY

found to be correct they shall be paid out of the general fund of the state: *Provided*, That all costs charged to the state for the treatment of contagious diseases shall be paid by the auditor general, and recharged to the county admitting patients treated for contagious diseases as provided in laws dealing with the treatment of contagious diseases.

Sec. 8. Appropriations. The expenses of carrying out the provisions of this act shall be paid from money appropriated for that purpose by the legislature. Appropriations for the purposes of this act made to pay the costs of investigations and treatment and for the use of the commission and to reimburse the general fund shall be separate and apart from appropriations to make effective the provisions of any other act.

Sec. 9. Any person found guilty of wilfully making a false statement or of wilfully giving false information for the purpose of securing aid under this act, shall be punished by a fine of not more than five hundred dollars or imprisonment in the county jail for not more than ninety days, and any official of any hospital or any physician who shall bill the state for the care of a patient in accordance with the fee schedules established under this act, and also attempt to force any parent, relative or guardian of such patient to pay an additional sum for such care, and who shall be found guilty thereof, shall be punished in the same manner.

Sec. 10. No official or agent, or representative, in carrying out the provisions of this act, shall enter any home or take charge of any child over the objections of the parents, or either of them or the persons standing in loco parentis or having other custody of such child, and nothing in this act shall be construed as limiting the power of a parent or guardian or person standing in loco parentis to determine what treatment or correction shall be provided for a child or the agency or agencies to be employed for such purpose.

This act is ordered to take immediate effect.

T. THOMAS THATCHER,

Clerk of the House of Representatives

FRED I. CHASE,

Secretary of the Senate.

Approved

FRANK MURPHY, Governor.

MINUTES OF MEETING OF THE COUNCIL

August 11, 1937

1. *Roll Call*.—The meeting was called to order by Dr. P. R. Urmston, chairman, at the Rainbow Club, Baldwin, Michigan, at 2:30 P. M., on August 11, 1937. Those present were: Drs. P. R. Urmston, Bay City; H. R. Carstens, Detroit; J. Earl McIntyre, Lansing; Wilfrid Haughey, Battle Creek; F. T. Andrews, Kalamazoo; Vernor M. Moore, Grand Rapids; I. W. Greene, Owosso; T. F. Heavenrich, Port Huron; Harlan MacMullen, Manistee; Roy H. Holmes, Muskegon; F. C. Bandy, Sault Ste Marie; B. H. VanLeuven, Petoskey; H. H. Cummings, Ann Arbor; A. S. Brunk, Detroit; Frank E. Reeder, Flint. Also present were Dr. Henry E. Perry, President, Newberry; Dr. Henry Cook, Flint; Dr. L. Fernald Foster, Bay City; Dr. Wm. A. Hyland, Grand Rapids; Dr. B. R. Corbus, Grand Rapids; Dr. H. A. Luce, Detroit; Dr. R. H. Pino, Detroit, and Executive Secretary Wm. J. Burns. Absent: Drs. F. A. Baker, Pontiac; W. E. Barstow, St. Louis, and W. A. Manthei, Lake Linden.

2. *Minutes*.—The minutes of the meeting of the Executive Committee of July 29, 1937, were read, corrected in one item, and approved.

3. *Financial Report*.—The financial report was presented, as well as the estimated income and expenditures for the balance of the year 1937; the latter is to be amplified further and presented to The Council at its September meeting. Bills payable for the month were presented and ordered paid on motion of Drs. MacMullen-Reeder. Carried unanimously.

4. *Medical Relief*.—The chairman of the Medical Economics Committee, Dr. R. H. Pino, Detroit, presented for approval the plan for administering medical relief in Michigan under the new Welfare Laws. This was thoroughly discussed and ended in a motion by Drs. Haughey-Greene that The Coun-

cil approve the action of the Executive Committee of The Council taken at its July 29, 1937, meeting, in adopting the plan of "Medical Administration." This motion was amended by Drs. Holmes-Haughey, as follows: Assuming that same refers only to general principles of the plan as proposed, and that the Committee on Medical Economics be authorized to develop these general principles and refer same to The Council at its September meeting. The amendment and the main motion were carried unanimously.

It is understood that this plan may be changed for each county to fit local conditions.

Dr. Pino stated that he would develop the general principles, mail copies of same to all members of The Council in a few days, so that the matter might be finally studied on September 26, 1937, by The Council. Dr. Pino was thanked for his attendance and good advice.

5. *Annual Report of The Council*.—The Annual Report of The Council was studied, section by section, and various amendments and changes were made throughout. Motion of Drs. Brunk-Andrews that The Council approve the entire report of The Council, as submitted and amended, for insertion in the Handbook going to the Delegates. Carried unanimously.

6. *Medico-Legal*.—The matter of Medico-Legal work was discussed by The Council, in considering the report of the County Societies Committee to be inserted in the Annual Report of The Council. Regarding proposed changes, a motion was made by Drs. Andrews-Holmes that the County Societies Committee be requested to make definite recommendations re the medical-legal set-up, and action to be taken, to be presented at The Council meeting of September; also to recommend necessary changes in the By-Laws of the Michigan State Medical Society. Carried unanimously.

7. *Program of the Michigan State Medical Society for 1937-38* was presented by Dr. Henry Cook, and thoroughly discussed. Motion of Drs. Bandy-Cummings that the program as outlined by Dr. Cook be approved, and a copy sent to each Councilor of the Michigan State Medical Society. Carried unanimously. A vote of thanks was extended to Dr. Cook for his work in formulating this program of future work.

8. *Joint Committee on Health Education*.—Dr. B. R. Corbus, chairman of the Joint Committee, presented a report on the work of his committee, and asked advice re future plans. He stated that this was an ideal way to meet the public and other organizations with whom we can work, for the public good. After full discussion, it was moved by Drs. Greene-Cummings that Dr. Corbus be thanked for his presentation, interest, and zeal in this matter, and that the Joint Committee on Health Education be assured of earnest coöperation. Carried unanimously.

9. *Schedules A, B, C, D*.—The executive secretary explained the contact made with the Auditor General and the Crippled Children Commission in Lansing on August 9 regarding Fee Schedules A, B, C, D, and the final changes made therein. Motion of Drs. Carstens-Bandy that the physicians' Fee Schedules be printed and sent to all members of the Michigan State Medical Society with the Secretary's Letter in September. Carried unanimously. The schedule should state that the fees represent at least a 50 per cent discount from normal fees. The "Hospital Audit Bureau" activity was presented by President Perry, and thoroughly discussed. Motion of Drs. Andrews-VanLeuven that the executive secretary be instructed to advise the auditor general verbally and in writing at once concerning the fact that the Michigan State Medical Society has not approved the Hospital Audit Bureau; and that all county medical societies be so advised. Carried unanimously.

10. *Model Constitution and By-Laws for County Medical Societies*.—This document, as presented to each councilor, was discussed. Motion of Drs. McIntyre-Bandy that the Model Constitution and By-Laws for County Medical Societies be adopted as a whole. Carried unanimously. A copy of the Model Constitution and By-Laws is to be sent to each County Medical Society of Michigan.

11. *Institutional Practice by Osteopaths*.—Dr. Cook reported on this Flint litigation, and stated that the case may be heard in a short time. General discussion. Motion of Drs. Heinrich-McIntyre, seconded by Holmes and Greene, that the Michigan State Medical Society coöperate with the city of Flint in this case and ask leave to enter as a defendant in this action. Carried unanimously.

12. *Annual Meeting*.—(a) The suggestion from Dr. M. S. Ballard, chairman of the Grand Rapids Committee on Arrangements, that the sum of \$100 be allowed to the Woman's Auxiliary for entertainment of women guests at the Annual Meeting in Grand Rapids next September, was discussed. Motion of Drs. Carstens-Andrews that the sum of \$100 be allowed to the Woman's Auxiliary for purposes of entertainment in Grand Rapids next September. Carried unanimously. (b) Secretary Foster explained the advantages of holding a Secretaries' Conference in connection with the Annual Meeting of the Michigan State Medical Society. The Council approved a Secretaries' Conference for Tuesday evening, September 28, 1937, for county medical society secretaries, and the officers and councilors of the Michigan State Medical Society, and next year's presidents of county medical societies—motion of Drs. Andrews-Holmes, carried unanimously. (c) Secretary Foster outlined the advantage of a

President's Reception on Wednesday, September 29, after the Parran Lecture. Motion of Drs. McIntyre-VanLeuven that the President's Reception be inaugurated at the 1937 Annual Meeting. Carried unanimously.

13. *Postgraduate Extension Courses*.—Dr. Cummings outlined the courses which will be started in September and October in the Upper Peninsula as well as the Lower Peninsula. The work is part of a five-year program. The Chair stated that the Councilors will be held responsible as chairmen for the conduct of the meetings and for the attendance.

14. *Legislative*.—President Perry spoke about the great sacrifice of time and energy made by Dr. L. G. Christian in his work as chairman of the Legislative Committee of the Michigan State Medical Society. Others who spoke about Dr. Christian's sacrifice were Drs. McIntyre, Greene and Cook. Motion of Drs. Holmes-McIntyre that the council extend to Dr. L. G. Christian an earnest expression of its highest appreciation and gratitude for his work, zeal and service to humanity and to Michigan Medicine; that this will never repay Dr. Christian what the profession owes him, but it is a symbol of our great thanks and esteem. Motion carried unanimously.

15. *Courses in Social Hygiene in Public Schools*.—Secretary Foster stated that he had the outlines of courses in Social Hygiene as given in Lansing schools. Motion of Drs. Holmes-McIntyre that the secretary's office notify county medical societies in the Secretary's Letter that these outlines are available in the office of the Executive Secretary at Lansing. Carried unanimously.

16. *Refresher Courses By Crippled Children Commission*.—President Perry reported on the refresher course given under the auspices of the Crippled Children Commission in Menominee. Motion of Drs. Greene-McIntyre that the matter of future refresher courses, to be given by the Crippled Children Commission with Social Security funds, be referred to the Committee on Postgraduate Medical Education, for action. Carried unanimously.

17. *Medico-Legal Defense for Delinquent Members*.—The obligation of the Michigan State Medical Society for defense of alleged malpractice suits when the State Society accepts dues of delinquent members against whom such claims arose while the member was in arrears, was thoroughly discussed. The opinion of Attorney Barbour was presented. Motion of Drs. Carstens-Andrews that when a delinquent member pays dues to the Michigan State Medical Society, that the Michigan State Medical Society do not accept the amount payable to the medical defense fund—for the period of time the member was delinquent—but return same to the member with an explanatory letter. Carried unanimously.

18. *U. A. W. Clinic*.—The Executive Secretary presented the explanation of the aims and purposes of the U. A. W. Clinic in Detroit, as presented by the Executive Secretary of the Wayne County Medical Society.

19. *150th Anniversary of the U. S. Constitution*.—Motion of Drs. McIntyre-Carstens that the Secretary be authorized to write the chairman of the committee arranging the celebration in connection with the 150th anniversary of the Constitution of the United States, transmitting greetings from the Michigan State Medical Society. Carried unanimously.

20. *P. G. Endowment Fund of the Michigan State Medical Society*.—Dr. Cook outlined the action of the Executive Committee of The Council on June 16, relative to the proposed P. G. Endowment Fund of the Michigan State Medical Society. Motion

of Drs. McIntyre-Carstens that the Council approve the action of the Executive Committee of The Council taken on June 16 re the postgraduate endowment fund of the Michigan State Medical Society. Carried unanimously.

Drs. McIntyre-Greene presented a motion that a committee be appointed to confer with the Chairman of the Postgraduate Medical Education Committee re the accomplishment of the proposed Postgraduate Endowment Fund, said committee to be composed of the chairman of The Council, the president-elect and the secretaries. Carried unanimously.

21. *Adjournment.*—The meeting was adjourned at 10:50 P.M.

MINUTES OF MEETING OF MATERNAL HEALTH COMMITTEE

August 19, 1937

Members present: Drs. Campbell, Wiley and Furlong.

Members absent: Drs. Seeley and Miller. Also present: Dr. Palmer and Miss Goddard of the United States Department of Public Health.

The meeting was called to order by Chairman Campbell in the Statler Hotel, Detroit, at 11:00 A.M. The question was brought up of the release of material from the study. Inasmuch as the Obstetrical Survey is a joint responsibility of the committee and the United States Public Health Department it was agreed that no material should be released without joint approval. Some of the details of the preparation of the final report were discussed.

Possible means of the publication of the final report was considered.

Dr. N. F. Miller was appointed to represent the committee to work in cooperation with Dr. Palmer and Miss Goddard in the preparation of the final report.

Some of the preliminary tabulations of the survey were discussed.

The next meeting of the committee will be held Thursday, September 9, at 12 noon, in the Hotel Statler.

Meeting adjourned at 12:25 P.M.

HAROLD A. FURLONG, M.D.,
Acting Secretary

Benzedrine Sulfate and Atropine in Treatment of Chronic Encephalitis

Isidore Finkelman, Chicago, and Louis B. Shapiro, Elgin, Ill. (*Journal A. M. A.*, July 31, 1937), treated twelve patients with postencephalitic parkinsonism during consecutive periods with atropine, benzedrine sulfate plus atropine, benzedrine sulfate alone, and again with benzedrine sulfate plus atropine. The best results were obtained during the combined treatment of atropine and benzedrine sulfate. Although atropine alone caused a diminution of tremor and rigidity, the addition of benzedrine sulfate caused improvement in the sleep cycle and reduced the frequency or caused the disappearance of oculogyric crises, and there was a feeling of increased energy. Two of the patients died during an influenza epidemic. Both had a history of head trauma. The relation of increased sympathetic stimulation to a reduction in resistance to pneumonic infection and the contraindication of benzedrine sulfate in patients with head trauma needs further study.

COUNTY SOCIETIES

CALHOUN COUNTY

WILFRED HAUGHEY, M.D.

Secretary

The June meeting of the Calhoun County Medical Society was held at Lyon Lake Country Club, south of Marshall, Tuesday, June 1, 1937.

There was a golf tournament in the afternoon and dinner at seven. Meeting called to order at 8:00 P. M., by President Brainard.

The minutes of the last meeting were approved as published in the Bulletin.

Dr. Church, for the golf committee, reported only a few playing. After the handicap allowances first prize went to Dr. G. W. Slagle, 72; second to Dr. Kenneth Lowe, 76.

The secretary read several communications from the State Medical Society, reporting on the Basic Science law which was signed by the governor Friday, May 25, 1937, after passing House and Senate, 73-21 and 28-1, respectively.

A letter from Senator Crawford was read.

The president read a letter from Dr. Becker, with interpolation, thanking for flowers sent.

The application of Dr. R. H. Harris for transfer of membership from Los Angeles County, California, to Calhoun County was read and, upon motion, was accepted, Dr. Harris having formerly been a member. He was declared elected.

There being no further business, Dr. Brainard introduced Dr. Bruce Fralich, Professor of Ophthalmology at Ann Arbor.

Discussion, Drs. Sleight, Haughey, Church, K. Lowe, Giddings and Hale.

Meeting adjourned. Attendance thirty-four.

CHIPPEWA-MACKINAC COUNTIES

GEO. A. CONRAD, M.D.

Secretary

"State Society Night" was celebrated by the Chippewa-Mackinac County Medical Society on August 16 in Sault Ste. Marie with twenty members and guests present. Dr. F. J. Moloney, president, welcomed the state officers and turned the meeting over to Dr. H. E. Perry, Newberry, president of the State Society. Dr. Perry called upon Dr. Grover C. Penberthy, Detroit, past-president of the State Society, who talked on "High Standards of Medical Practice."

Dr. Louis J. Hirschman, Detroit, past-president of the State Society was called upon and discussed the "Activities of the American Medical Association." Dr. Paul R. Urmston, Bay City, Chairman of The Council, set forth "What the State Society is Doing and Will Do for You." Dr. L. Fernald Foster, Bay City, Secretary of the Michigan State Medical Society, discussed "Organization, and the State Meeting."

"County Societies and the State Society Program of 1937-38" formed the topic of discussion of Dr. Henry Cook of Flint, president-elect of the State Society. Wm. J. Burns, Lansing, executive secretary of the State Society, reviewed "Legislative Activity".

Among those present were Drs. F. H. Husband, J. A. Reese, W. F. Mertaugh, S. H. Vegors, E. O. Gilfillan, E. S. Rhind, David Littlejohn, I. V. Yale, F. J. Moloney, J. G. Blain, F. C. Bandy, Geo. A. Conrad and Dr. Birch.

COUNTY SOCIETIES

DELTA COUNTY

NATHAN J. FRENN, M.D.
Secretary

The Delta County Medical Society entertained officers of the Michigan State Medical Society at a "State Society Night" on Wednesday, August 25. Seventeen members and guests were present. President H. Q. Groos welcomed the guests and called first upon Dr. Louis J. Hirschman, Detroit, past-president of the State Society, who summarized the "Activities of the American Medical Association." Dr. Roy H. Holmes, Muskegon, member of the State Council from the Eleventh District, spoke concerning the Afflicted and Crippled Child laws. Wm. J. Burns, Lansing, executive secretary of the State Society, reviewed recent Legislative Activity. Dr. L. Fernald Foster, Bay City, secretary, discussed "Organization and the Annual Convention of the State Society."

Among those present were Drs. H. W. Long, W. A. LeMire, D. W. Boyce, Otto Hult, Joseph Witters, Arthur Backus, A. S. Kitchen, Louis P. Groos, G. W. Moll, John J. Walch, H. J. Defnet and Dr. Clausson of Detroit.

trict, outlined the work and activities of the Public Relations Committee. Dr. W. E. Barstow of St. Louis, councilor from the Eighth District, discussed the need for politico-socio interests by the county medical society.

Dr. L. Fernald Foster, Bay City, secretary of the Michigan State Medical Society, discussed "Greater Organization for the county medical societies of the State." Wm. J. Burns, Lansing, executive secretary of the Michigan State Medical Society outlined the health legislation passed by the recent Legislature.

All members of the Manistee County Medical Society, except one, were present at the "State Society Night." Among the members and guests who were present were the following: Drs. Stephen Fairbanks, D. A. Jamieson, C. L. Grant, W. H. Norconk, E. B. Miller, L. W. Switzer, E. A. Oakes, H. Mullenmeister, John F. Konoft, E. F. Sladek, B. B. Bushong, J. G. Zimmerman, Mark Osterlin, Dwight Goodrich, Gregory Moore, E. C. Hansen, H. Ramsdell, S. P. Smiseth. Also present were Mrs. F. T. Andrews, Mrs. Wm. J. Burns, Mrs. Harlan MacMullen.

MARQUETTE-ALGER COUNTIES

D. P. HORNBOGEN, M.D.
Secretary

Officers of the State Society were guests of honor at a "State Society Meeting" held by the Marquette-Alger County Medical Society on Wednesday, August 18. Dr. E. R. Elzinga, president, welcomed the guests and turned the meeting over to Dr. Henry E. Perry, Newberry, Michigan State Medical Society president.

Dr. Louis J. Hirschman, Detroit, past-president of the Michigan State Medical Society, was first on the program and discussed the "Activities of the American Medical Association." Dr. Grover C. Penberthy, Detroit, past-president of the Michigan State Medical Society, talked on the "High Standards of Medical Practice." Dr. L. Fernald Foster, Bay City, secretary of the Michigan State Medical Society, discussed "Organization and the State Meeting." Wm. J. Burns, Lansing, executive secretary of the Michigan State Medical Society, reviewed recent "Legislative Activity." Dr. Henry Cook, Flint, president-elect of the State Society, outlined the "State Society Program for 1937-38."

Among those present were Drs. L. W. Howe, M. Cooperstock, J. P. Bertucci, R. G. Janes, Chas. N. Bottum, E. R. Elzinga, V. H. Vandeverter, A. L. Swinton, N. J. McCann, Richard Berry, F. A. Fennig, H. P. Blake, Geo. I. Keskey, D. P. Hornbogen, C. D. Hart, and Drs. Hanelin, Tisdale, and Lambert. Also present was representative Chas. F. Sundstrom.

DICKINSON-IRON COUNTY

W. H. HURON, M.D.
Secretary

Dickinson-Iron County Medical Society was host to the officers of the Michigan State Medical Society on their stop at Crystal Falls, August 24. Fifteen members and guests were present and enjoyed a venison dinner. Drs. White and Camper came to the meeting in Doctor White's airplane.

Dr. D. R. Smith, president, welcomed the state officers and turned the meeting over to Dr. Henry E. Perry, Newberry, president of the Michigan State Medical Society. Dr. Louis J. Hirschman, Detroit, past-president of the Michigan State Medical Society, outlined the "Activities of the American Medical Association." Dr. Roy H. Holmes, Muskegon, councilor of the District, discussed the Afflicted and Crippled Child laws. Wm. J. Burns, Lansing, executive secretary of the State Society, spoke of recent "Legislative Activity." Dr. L. Fernald Foster, Bay City, secretary of the Michigan State Medical Society, discussed "Organization, and the State Society Annual Meeting."

Among those present were Drs. T. E. Camper, W. H. Huron, L. E. Irvine, Cliff Menzies, R. E. Hayes, H. H. Haight, Wm. J. Kofmehl and Robert White.

MANISTEE COUNTY

C. L. GRANT, M.D.
Secretary

The Manistee County Medical Society held a "State Society Night" at the Country Club of Manistee on September 9. Golf in the afternoon was followed by a social hour and "round table discussion." After the dinner, presided over by Dr. Kathryn Bryan, president, the meeting was turned over to Dr. Harlan MacMullen, Manistee, councilor of the Ninth District, who called on Dr. P. R. Urmston, Bay City, chairman of The Council of the Michigan State Medical Society, to outline "The Activities of The Council."

Dr. Roy H. Holmes, Muskegon, councilor of the Eleventh District, discussed the new Crippled and Afflicted Child laws and the schedules. Dr. F. T. Andrews, Kalamazoo, councilor of the Fourth Dis-

MASON COUNTY

C. A. PAUKSTIS, M.D.
Secretary

The Mason County Medical Society was host to officers of the Michigan State Medical Society on Thursday noon, September 9, on the occasion of a "State Society Meeting" held in Ludington. President W. S. Martin welcomed the guests and called upon Dr. Harlan MacMullen, Manistee, councilor of the Ninth District, who talked on "Why a State Society?" Dr. Paul R. Urmston, Bay City, chairman of the State Society Council, spoke on "What Your Officers Do." Dr. Roy H. Holmes, Muskegon, member of The Council from the Elev-

enth District, discussed the Afflicted and Crippled Child laws. Dr. Wm. E. Barstow, St. Louis, counselor from the Eighth District, explained "The Necessity for Politico-Socio Activity by the County Medical Society." Dr. F. T. Andrews, Kalamazoo, counselor from the Fourth District, described the workings of the Public Relations Committee. Dr. L. Fernald Foster, Bay City, secretary of the Michigan State Medical Society, spoke on Organization and the State Society Annual Meeting. Wm. J. Burns, Lansing, executive secretary of the State Society, reviewed recent Legislative Activity.

Among those present were Drs. W. Force, W. Taylor, O. M. Spencer, R. Davis, L. Goulet, V. J. Blanchett, C. A. Paukstis and H. B. Hoffman.

MECOSTA-OSCEOLA COUNTIES

GLENN GRIEVE, M.D.

Secretary

The regular monthly meeting of the Mecosta-Osceola County Medical Society was called to order in the Western Hotel, Big Rapids, on Tuesday, August 10. Eighteen members and guests were present.

Dr. Roy H. Holmes, Muskegon, counselor for the Eleventh District, spoke on the "Diagnosis and Treatment of Syphilis."

"Legislation" was the subject under discussion by Wm. J. Burns, Lansing, executive secretary of the Michigan State Medical Society.

Among those present were Drs. Jacob Bruggema, James B. Campbell, Chester Clark, Glenn Grieve, Max C. Igloe, L. E. Kelsey, Louis K. Peck, C. J. Power, Thomas P. Treynor, Gordon H. Yeo, and Drs. Martin, Pryor, Rowe, Zetterstedt, Fisher and Hamilton.

MENOMINEE COUNTY

WM. S. JONES, M.D.

Secretary

The Menominee County Medical Society held a "State Society Meeting" on Wednesday noon, August 25, at Menominee. President A. R. Peterson welcomed the state officers and turned the meeting over to Dr. Henry E. Perry, Newberry, president of the State Society, who introduced the speakers on the program.

Dr. J. Earl McIntyre, Lansing, counselor of the Second District, and secretary of the State Board of Registration in Medicine, spoke on the "State Board of Registration in Medicine." Dr. Roy H. Holmes, Muskegon, counselor of the Eleventh District, discussed the Afflicted-Crippled Children laws. Wm. J. Burns, Lansing, executive secretary of the State Society, reviewed recent Legislative Activity. Dr. L. Fernald Foster, Bay City, secretary of the Michigan State Medical Society, discussed Organization and the State Society Annual Meeting.

State Representative Joseph Mullen was present and made a few remarks. Also present were Drs. W. S. Jones, H. T. Sethney, J. C. Scully, A. R. Peterson, Edward Sawbridge, Wm. Baren, K. G. Pinigan, A. T. Nadine and Clarence H. Baren.

MUSKEGON COUNTY

LELAND E. HOLLY, M.D.

Secretary

A business meeting of the Muskegon County Medical Society was held at the Century Club on Monday, June 14, 1937. The meeting was called to order by President C. B. Mandeville at 9:00 P.M.

Correction was made to the minutes of the previous meeting in that Dr. Edward Foss had been named chairman of the Centennial Exhibit Committee.

A very complete and detailed report of the Allied Health Committee was given by Dr. Hartwell, which has been incorporated in the minutes. There was much discussion and it was pointed out that the committee had done much fine work and was deserving of complete support by the Society.

Following the suggestions given by the committee it was voted unanimously that letters be sent to the superintendents of both hospitals calling attention to the fact that occasionally private nurses had been put on cases without permission of the attending physician, and asking their coöperation in preventing this impossible situation.

A long and frank discussion of the venereal problem of the county was undertaken without any definite program being provided. Dr. M. E. Stone, health officer of Muskegon, presented a plan for establishing a County Health Unit for the rural districts of the County. After a number of interesting plans had been presented and explained, the following resolution was adopted unanimously: that the Unit be County-wide; that the health officer be a physician, licensed to practice in the State of Michigan and maintain membership in the Muskegon County Medical Society; that the work shall not include holding diagnostic or immunization clinics, but that some form of medical participation be included so that the necessary procedures would be carried out in the physician's office; and that a staggered five-man physician board be appointed by the president of the Medical Society to have full control of all matters appertaining purely to the workings of the Health Unit. The meeting was adjourned at midnight.

* * *

The regular dinner meeting of the Muskegon County Medical Society was held at the Occidental Hotel, Friday June 25, 1937. The meeting was called to order by President-Elect Teifer.

The Centennial Committee reported to the Society.

Dr. William LeFevre introduced the speaker of the evening, Dr. Drew Luten, Associate Professor of Clinical Medicine of Washington University. Dr. Luten delivered a most entertaining and instructive talk on the "Clinical Use of Digitalis." An abstract of this talk is printed in the Bulletin. The meeting adjourned at 10:30 P. M.

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A meeting of the Muskegon County Medical Society was held at the Century Club, Monday, August 16, 1937. The meeting was called to order by President Mandeville at 9:20 P. M. The application for membership of Dr. Miller was read and referred to the proper committee. There was free discussion of the new law making mandatory prenuptial examination of male and female. It was decided that the individual physician should make his own charge. The question of doctors accepting reduced fees from F. E. R. A. patients and giving a receipt for the same was next discussed. The matter was referred to the Public Relations Committee for discussion with Mr. Richman. The meeting adjourned at 11:00 P. M.

The regular meeting of the Muskegon County Medical Society was held on Tuesday, August 31, 1937. The meeting was called to order by President Mandeville. The applications for membership of Dr. Dereginski and Dr. Price were read and referred to the proper committee.

Following a free discussion there was a consensus of opinion of the members that Red Cross first-aid stations were not essential in as thickly a populated community as this, particularly in view of the very

COUNTY SOCIETIES

short distance to local hospitals or physicians' offices. It was emphasized that whenever a severe accident occurs, great damage is done to patients at the hands of insufficiently trained personnel, it being noted that the ambulances of Muskegon have specially trained personnel who are familiar with the proper handling of injured patients. After a very complete discussion, it was moved and carried that a committee meet with the Red Cross representatives and discuss the problem with them. There was a feeling of the Muskegon County Medical Society that this practice should be discouraged.

The councilor for the Eleventh District, Doctor Holmes, discussed the following State Society Matters:

1. *The Teaching of Sex Hygiene in the Schools.*—It was suggested that the secretary write to the three local school systems notifying them that the Medical Society is prepared to furnish sex hygiene lectures in the schools.

2. *Medical Relief Bills.*—The State Society was successful in keeping intact the physician-patient relationship in the new relief bill.

3. *Afflicted and Crippled Child's Act.*—The Crippled Child Commission and the Auditor-General O.K.'d the original fee schedule as of September 1. It was called to the attention of the Society that too many cases were being admitted under this act. In most instances it is due to a breakdown of the economic filter and only rarely to the medical filter. It was pointed out that if the case load becomes too high the next legislature may throw the burden back to the county, so we must keep our case load down. A committee is to be appointed to discuss this matter with Probate Judge F. E. Thatcher.

4. *Syphilis Control.*—If we wish to prevent clinics for the treatment of this disease in this country, the medical societies must take the lead and maintain treatment in medical hands. In our contacts with lay organizations, we must emphasize the importance of "seeing the family doctor," on all health problems. The meeting adjourned at 11:00 P. M.

O. M. C. O. R. O. COUNTIES

(Otsego-Montmorency-Crawford-Ogemaw-Roscommon-Oscoda)

C. G. CLIPPERT, M.D.

Secretary

The O. M. C. O. R. O. County Medical Society held a meeting at West Branch, Michigan, on Wednesday, September 8, at 6:30 P.M. Dr. Paul R. Urmston, Bay City, chairman of The Council of the Michigan State Society, and Dr. L. Fernald Foster, Bay City, secretary of the Michigan State Medical Society, were present. Doctor Urmston spoke on "The Activities of The Council and the Annual State Meeting." "Legislation and Organization" was the subject of discussion by Doctor Foster.

ONTONAGON COUNTY

E. J. EVANS, M.D.

Secretary

Every member of the Ontonagon County Medical Society turned out to meet and hear the officers of the State Society at the "State Society Meeting" of Monday noon, August 23, which was held in Ontonagon. Dr. C. F. Whitefield welcomed the state officers and turned the meeting over to Dr. Henry E. Perry, Newberry, President of the Michigan State Medical Society, who introduced the speakers.

Dr. Louis J. Hirschman, Detroit, past-president of the State Society, discussed the "Activities of the American Medical Association." Dr. Roy H. Holmes, Muskegon, Councilor of the Eleventh District, spoke relative to the afflicted-Crippled Child laws. Wm. J. Burns, Lansing, executive secretary of the State Society, reviewed recent "Legislative Activity." Dr. L. Fernald Foster, Bay City, Secretary of the Michigan State Medical Society, discussed "Organization and the Annual State Meeting."

Those present in addition to the speakers were Dr. Whiteshield, Dr. E. J. Evans, Dr. F. W. McHugh, Dr. W. F. Strong, Dr. J. L. Bender. State Representative Isadore A. Weza of Ontonagon, was also present.

SCHOOLCRAFT COUNTY

GEO. A. SHAW, M.D.

Secretary

Schoolcraft County Medical Society entertained the officers of the Michigan State Medical Society at a "State Society Night" at Blaney on August 17. Dr. A. R. Tucker, President, welcomed the officers and turned the meeting over to Dr. H. E. Perry of Newberry, president of the State Society. Dr. Perry called first upon Dr. Grover C. Penberthy of Detroit, past-president of the State Society, who talked on "High Standards of Medical Practice." Dr. L. G. Christian, chairman of the State Society Legislative Committee, described the "Passage of the Basic Science Law." Dr. Philip A. Riley, Jackson, vice-speaker of the House of Delegates, explained the "Functions of the Basic Science Law." Dr. Paul R. Urmston, Bay City, chairman of the council of the Michigan State Medical Society, summarized "What the State Officers are Doing for You."

"The State Society Meeting" was discussed by Dr. L. Fernald Foster, Bay City, Michigan State Medical Society secretary. Dr. Henry Cook, Flint, president-elect, spoke on "County Medical Societies." Wm. J. Burns, Lansing, State Society executive secretary, discussed "Organization." Twenty-seven members and guests were present. Among them were Drs. R. E. L. Gibson, Geo. Swanson, R. E. Spinks, Frank P. Bohn, C. B. Toms, C. D. Hart, E. H. Campbell, A. T. Rehn, Wm. R. Purmont, and Dr. Miller of Luce County; Drs. James Fyvie, Gail Broberg, E. Brenner, and Geo. A. Shaw of Schoolcraft County. Also present were Dr. C. D. Crowley, Jackson, President Jackson County Medical Society; Dr. R. D. Scott, Flint; and Dr. G. K. Carpenter of Nashville, Tenn.

THE BUSINESS SIDE OF MEDICINE

(Continued from page 766)

rights of such an agent, both in drawing up such a document, and in the administration of it.

Looking such a problem squarely in the face is to our mind one of the best things the doctor can do for his family, yet one of the easiest, and certainly one of the least expensive. Because it can be done "anytime" it is very apt to be postponed. Don't put it off.

Michigan's Department of Health

C. C. SLEMONS, M.D., Dr.P.H., Commissioner LANSING, MICHIGAN

MICHIGAN LABORATORIES REGISTERED UNDER ACT 45, P. A. 1931

Since laboratory tests required under the Antennuptial Physical Examination Law must be performed by the Michigan Department of Health or a laboratory registered by the Michigan Department of Health, the current list of registered laboratories in Michigan is published herewith. The following laboratories have complied with the regulations of the Michigan Department of Health and have been approved for:

Serodiagnosis of Syphilis and Microscopy in Diphtheria, Tuberculosis, and Gonococcic Infections

Reg. No.	NAME	LOCATION
5	St. Joseph Mercy Hospital	Ann Arbor
6	University of Michigan Hospital	Ann Arbor
175	Chemical and Bacteriological	Battle Creek
11	Lella Y. Post Montgomery Hospital	Battle Creek
70	Nichols Memorial Hospital	Battle Creek
9	Sanitarium	Battle Creek
13	Health Department	Bay City
14	Mercy Hospital	Bay City
191	Gamble Clinic	Bay City
170	Mercy Hospital	Benton Harbor
166	Dearborn Clinical	Dearborn
183	Ford Motor Company Medical	Dearborn
1	Health Department	Detroit
195	Brooks	Detroit
100	Clark Clinical	Detroit
140	Charles Godwin Jennings Hospital	Detroit
184	Chenik Hospital	Detroit
18	Children's Hospital	Detroit
17	Delray General Hospital	Detroit
164	Detroit X-Ray & Clinical	Detroit
185	Detroit Polyclinic	Detroit
189	East Side General Hospital	Detroit
113	Evangelical Deaconess Hospital	Detroit
156	Fairview Sanatorium	Detroit
136	Florence Crittenton Hospital	Detroit
21	Grace Hospital	Detroit
73	Harper Hospital	Detroit
176	Havers	Detroit
22	Henry Ford Hospital	Detroit
188	Jefferson Clinic	Detroit
142	Medical Clinical	Detroit
162	Buesser	Detroit
198	Ellwart Clinical	Detroit
199	Jordan Clinical	Detroit
201	East Side Medical	Detroit
206	Moer General Hospital	Detroit
203	Central Laboratories	Detroit
180	Michigan Diagnostic	Detroit
24	National Pathological	Detroit
157	Nottingham Clinical	Detroit
25	Owen Clinical	Detroit
88	Parkside Hospital	Detroit
26	Physicians' Service	Detroit
27	Providence Hospital	Detroit
28	Receiving Hospital	Detroit
31	St. Joseph Mercy Hospital	Detroit
32	St. Mary's Hospital	Detroit
76	Schaefer	Detroit
181	Stafford, Frank	Detroit
196	Stafford Biological	Detroit
117	Woman's Hospital	Detroit
97	Seymour Hospital	Eloise
36	Hurley Hospital	Flint
112	Women's Hospital	Flint
209	St. Joseph Hospital	Flint
2	Western Michigan Division, Mich. Dept. Health	Grand Rapids
167	Allergic & Clinical	Grand Rapids
38	Blodgett Memorial Hospital	Grand Rapids
40	Brotherhood Private	Grand Rapids
37	Butterworth Hospital	Grand Rapids
192	Hufford	Grand Rapids
42	Western Michigan Clinical	Grand Rapids

Reg. No.	NAME	LOCATION
41	St. Mary's Clinical	Grand Rapids
116	Cottage Hospital	Grosse Pointe
94	Health Department	Hamtramck
44	General Hospital	Highland Park
3	Upper Peninsula Division, Mich. Dept. Health	Houghton
193	Itzov Clinical	Iron Mountain
146	Health Department	Jackson
186	W. A. Foote Memorial Hospital	Jackson
47	Public Health Department	Kalamazoo
91	Bronson Methodist Hospital	Kalamazoo
46	New Borgess Hospital	Kalamazoo
0	Michigan Department Health	Lansing
163	Larkum Clinical	Lansing
69	St. Lawrence Hospital	Lansing
134	St. Luke's Hospital	Marquette
141	Diagnostic Clinic	Monroe
104	Mercy Hospital	Monroe
187	Monroe Hospital	Monroe
51	Macomb County	Mt. Clemens
50	St. Joseph Hospital	Mt. Clemens
54	Mercy Hospital	Muskegon
118	Pawating Hospital	Niles
111	William H. Maybury Sanatorium	Northville
56	Department Health, General Hospital	Pontiac
57	Oakland County Health	Pontiac
128	Pontiac State Hospital	Pontiac
58	St. Clair County	Port Huron
200	Port Huron Hospital	Port Huron
83	Health Department	Roseville
59	Central Laboratory	Saginaw
108	Clinton Memorial Hospital	St. Johns
168	Hart Clinic	St. Johns
154	Chippewa County War Memorial Hospital	Sault Ste. Marie
182	Sturgis Memorial Hospital	Sturgis
62	Traverse City State Hospital	Traverse City
63	General Hospital	Wyandotte

Laboratories Registered for Microscopy in Diphtheria, Tuberculosis and Gonococcic Infections

Reg. No.	NAME	LOCATION
205	James W. Sheldon Memorial Hospital	Albion
4	City Laboratory	Ann Arbor
129	Department Pediatrics & Infectious Diseases	Ann Arbor
10	Health Department	Battle Creek
147	Hess Clinical	Bay City
137	Jones Clinic	Bay City
143	Shurly Hospital	Detroit
178	Harper Out-Patient	Detroit
102	North End Clinic	Detroit
34	St. Francis Hospital	Escanaba
35	Board of Health	Flint
197	Holland City Hospital	Holland
124	Michigan State Sanatorium	Howell
43	Grand View Hospital	Ironwood
45	Mercy Hospital	Jackson
48	Kalamazoo State Hospital	Kalamazoo
119	Fairmount Hospital	Kalamazoo
121	Edward Sparrow Hospital	Lansing
125	Michigan Home & Training School	Lapeer
126	Morgan Heights Sanatorium	Marquette
194	City Health Department	Marquette
204	Oaklawn Hospital	Marshall
53	Hackley Hospital	Muskegon
123	Wayne County Training School	Northville
107	Memorial Hospital	Owosso
66	Petoskey Hospital	Petoskey
132	St. Joseph Mercy Hospital	Pontiac
207	Saginaw County Laboratory	Saginaw
150	Ypsilanti State Hospital	Ypsilanti
208	Beyer Memorial Hospital	Ypsilanti

Institutional and Industrial Laboratory Service

Reg. No.	NAME	LOCATION
127	University Health Service	Ann Arbor
144	Pasteur Institute	Ann Arbor
177	Michigan Bell Telephone Company	Detroit
67	Robison Laboratory, Incorporated	Detroit
33	Michigan State College	East Lansing
173	Ionia State Hospital	Ionia
55	Olivet College Health Service	Olivet

ADMINISTRATION OF MICHIGAN'S ANTENUPTIAL PHYSICAL EXAMINATION LAW

"Upon the medical profession of Michigan rests the major responsibility for successful operation of the Antenuptial Physical Examination Act which becomes effective October 29, 1937," declares Dr. C. C. Slemmons, state health commissioner. "It is in the doctor's office that the fundamental values inherent in this new law will be sold to the prospective families of this state. The friendly understanding there created will insure, in large measure, the cordial compliance with the provisions of this act so necessary to its continued successful operation."

The new law, Act 207, P. A. 1937, provides in effect that all persons making application for license to marry shall at any time within fifteen days prior to such application have a physical examination including a Kahn test for syphilis, and it shall be unlawful for the county clerk of any county to issue a license to marry to any person who fails to present and file with such clerk the required certificate. It also provides that the certificates as to the examination shall be filed with the county clerk at the time application for license to marry is made.

Laboratory tests required under the act include a Kahn test for syphilis, a dark field test where indicated and a microscopic test for gonococci when indicated. All laboratory tests shall be performed by the Michigan Department of Health or by a laboratory registered by the Michigan Department of Health. Tests performed by the Department will be made free of charge.

If the physician making the examination finds no evidence of venereal disease on the basis of negative laboratory and clinical findings, he shall issue to the examinee a certificate to that effect on the form prescribed by the Michigan Commissioner of Health. These certificates must be signed by the physician and by the applicant in the presence of the physician.

Physicians will obtain the official certificates from their county clerks. The information contained on the certificate and any matter pertaining to the examination are closed records and cannot be disclosed to anyone except as may be required by law. The form of the certificate to be issued by the physician is as follows:

STATE OF MICHIGAN

MEDICAL CERTIFICATE FOR MARRIAGE LICENSE

City..... Date.....

THIS IS TO CERTIFY that I have this day examined

Name of Applicant.....

Address

in accordance with the provisions of Act No. 207, Public Acts of 1937, and in my opinion said applicant is not afflicted with any venereal disease and the tests for syphilis and gonorrhea made at the.....

Laboratory on....., 193.... are negative.

Signed.....M.D.

Address

Applicant

(To be signed in presence of physician)

The procedure to be followed by the prospective marriage license applicant is first to go to a physician some time within fifteen days prior to the date of applying for a marriage license. There he will obtain the preliminary clinical examination and arrangements will be made for the required blood test and any other indicated laboratory tests. If the results of laboratory and clinical examinations show no evidence of venereal disease in the opinion of the examining physician, he will then issue the official medical certificate to the applicant. This certificate must be signed by the applicant in the presence of the physician. The law does not specify the fee

which the physician will charge for his examination. Laboratory tests made by the Michigan Department of Health are made free of charge.

When the applicant has received his medical certificate, then he will present it to his county clerk at the time he applies for a marriage license. The certificate must be used within fifteen days, and both bride and groom must present certificates before the marriage license application can be made out. The usual five day interval must elapse after the application is granted before the license can be issued. The law does not specify any time limitation for the use of the marriage license once it has been issued.

As to the necessary qualifications of the physicians who may conduct the physical examinations required under this act, the Attorney General of Michigan has ruled that "It is my opinion that the reference to physicians in the act is to any physician or doctor authorized to practice medicine or surgery or to any osteopath authorized to practice that profession under the laws of this state."

The Attorney General has also ruled that marriages performed by the judge of probate in any county under Act 180, Public Acts of 1897, commonly referred to as the secret marriage law, are not affected by the new antenuptial physical examination law.

In order to provide for the additional free laboratory tests to be performed under Act 207, the Michigan Department of Health has altered its laboratory form No. F-1 which is used by physicians in requesting serologic reaction tests for syphilis. On the new form the physician must indicate the purpose for which the test is to be made; i.e., For Diagnosis, For Marriage License, or For Control of Treatment. Laboratory reports will not be made unless the form is filled out completely.

Since one of the values to be derived from the new law will be an opportunity to check the prevalence of venereal disease, the Michigan Department of Health is requiring that all registered laboratories submit reports of examinations performed under this law. With this data and that available from the state laboratories, relatively accurate index of the prevalence of venereal disease in a particularly susceptible age group will be obtained.

MONTHLY INCIDENCE OF COMMUNICABLE DISEASE

At the time of this writing two diseases are very much in the forefront, poliomyelitis and typhoid fever. The incidence of the latter disease is rather low although there has recently occurred an outbreak in the city of Flint. The mode of transmission was through food from a restaurant. Although not all details of the epidemiological picture are complete, enough is known at this writing so that no further cases are expected from the source. The outbreak serves as a reminder that typhoid is not an extinct disease and that food handlers who are carriers or cases are apt to be sources of an outbreak. Physicians are urged to bring to the attention of the health officer as early as possible any case of illness which they suspect of being typhoid. It is usually too late to prevent an outbreak if the physician waits until the diagnosis is well established before telling the health officer of the case.

Poliomyelitis is showing an incidence considerably greater than that of a year ago. The season is far enough advanced that at this time it is not anticipated that there will be a big poliomyelitis year, at least not big in comparison with the year 1931, when 1,137 cases were reported.

The department is not providing convalescent serum. Many requests are received for this product for therapeutic use. The suggestion is made that if the physician believes it wise to use some specific therapy a transfusion be given. This may be given from any donor who has a compatible blood, and, of course, with all precautions indicated in any transfusion. The donor need not have a history of having had poliomyelitis, since it has been found that a high percentage of all adults are immune as shown by the neutralization tests with poliomyelitis virus. In the treatment of an acute case of poliomyelitis it is exceedingly important to keep in mind the possibility of preventing or reducing the amount of residual paralysis by means of placing all weakened or paralyzed muscles at rest. This should be a complete rest and is usually obtained only by means of splints. Careful examinations should be made daily to detect promptly any weakened or paralyzed muscles.

The incidence of diphtheria continues to run high for the season although this is the time of year when the lowest incidence is to be expected. Because of the relatively high number of cases at this time it is anticipated that there may be a considerable increase during the fall and early winter months.

Scarlet fever likewise continues high although this is somewhat of a hang-over from the high season of the winter and spring just past.

Another disease which is higher than usual for the season is measles and it is anticipated that this disease will continue to increase slowly from now until the spring months of next year, when it is expected that there will be a rather large outbreak.

RABIES

The only two deaths with an established diagnosis of human rabies within the last five years occurred recently. This is the period of time exactly corresponding with that of the distribution of free rabies vaccine by the Michigan Department of Health. It was to be expected, however, with the great prevalence of rabies among dogs for months past, that sooner or later there would be a human death through neglect and failure to give anti-rabic treatment.

The two recent deaths from rabies were children, a boy thirteen and a girl of ten. The girl had no anti-rabic treatment. In the case of the boy the matter was not brought to the attention of the local health officer until thirty days from the time of the bite. He was then given twelve injections of rabies vaccine but finally came down with rabies six weeks after having received the severe bite on the face. The case was treated by a physician and had been cauterized with phenol at the time of the bite, but the parents had failed to have him return for further treatment, and both the parents and the physician had failed to notify the health officer. Had the health officer been notified he would have made it his business to follow up the case and urge that rabies vaccine be given. The cautery with phenol was not effective, the only effective cautery for the prevention of rabies being nitric acid. Physicians everywhere are urged to report all dog bite cases coming to their attention to the local health officer.

Physicians are again reminded that it is not considered necessary to give rabies vaccine to all people having been bitten by dogs. Those receiving bites from dogs that can be located and kept under observation for a period of ten days need not be treated as long as the dog shows no evidence of illness. The only exception to this is a bite on the

head or neck. In such cases, even though the dog be under observation, it is well to start the rabies treatment and if after a period of five or six days the dog has shown no evidence of illness, the treatment may then be discontinued. Anyone receiving a bite from an animal found to be rabid or from animals that have escaped and cannot be observed should be given the rabies vaccine, likewise those individuals whose bare skin or mucous membrane has been in contact with the saliva from such animals, even though there be no evidence of a bite or break in the skin.

Pharmacologic Study of Toxemia Theory of Surgical Shock

In studying the pharmacology of the toxemia theory of surgical shock Carl A. Dragstedt and Franklin B. Mead, Chicago (*Journal A. M. A.*, Jan. 9, 1937), performed nine experiments on dogs by testing the blood and lymph specimens. In no instance was there any indication of a physiologically active substance being present. These negative results, in addition to indicating the absence of a physiologically active substance such as histamine in the shock specimens of blood and lymph, also show that the methods employed are free from certain complicating factors. For example, Ponder and others have shown that substances having vascular effects are apt to appear in serums separating from specimens of clotted blood, and Phemister and Handy have shown that blood which has been "traumatized" by shaking or hemolysis and the like also acquires vasodilator and constrictor properties. When these negative results in the case of surgical shock are contrasted with the authors' positive results in anaphylactic shock, it is at once apparent that there is a distinct difference between the course of events in the two instances. In a typical anaphylactic shock there is an abrupt precipitous fall of blood pressure to shock levels from which the animal may or may not gradually recover. In surgical shock, however, there is a slow, gradual, progressive fall of blood pressure to shock levels from which, as a rule, there is no spontaneous recovery. Results indicate that, if surgical shock was the result of a toxemia secondary to the absorption from the traumatized area of a vasodepressor substance such as histamine, it should be possible at some stage of the process to detect the toxin in the blood plasma by the methods employed. The authors' results, however, have been consistently negative.

CORRESPONDENCE

Editor, Journal of the
Michigan State Medical Society:

Last night a morphine addict broke into my office and made away with a quantity of morphine tablets and morphine and atropine, and a Schick electric razor. This man is nearly six feet tall, of the usual sallow complexion, and has rather heavy features and prominent cheek-bones. He tells the story of just being discharged from prison and of being on his way to a government hospital to be cured. He is quite a sobber and exhibits chest wounds he claims were due to a bayonet, also claims war service.

If you would print this communication in the JOURNAL, some physician might recognize him and should notify authorities. He is wanted by the Mt. Pleasant State Police. He is quite a familiar figure around Central and Northern Michigan.

F. G. SLATTERY, M.D.,
Clare, Michigan.

◆ General News and Announcements ◆

The One Hundred Per Cent Club of the Michigan State Medical Society:

1. Alpena County Medical Society.
2. Branch County Medical Society.
3. Cass County Medical Society.
4. Clinton County Medical Society.
5. Eaton County Medical Society.
6. Gogebic County Medical Society.
7. Ingham County Medical Society.
8. Jackson County Medical Society.
9. Lapeer County Medical Society.
10. Lenawee County Medical Society.
11. Livingston County Medical Society.
12. Luce County Medical Society.
13. Manistee County Medical Society.
14. Menominee County Medical Society.
15. Muskegon County Medical Society.
16. Newaygo County Medical Society.
17. Northern Michigan Medical Society.
18. Oceana County Medical Society.
19. Ontonagon County Medical Society.
20. Schoolcraft County Medical Society.
21. Shiawassee County Medical Society.
22. Tuscola County Medical Society.

The above County Medical Societies have paid dues in full for each and every member of the County and State Medical Society. A number of other County Societies lack but a few, sometimes only one or two, of being One Hundred Per Cent. Have YOU paid your dues?

Council and Committee Meetings:

1. September 21, 1937—Contact Committee with Michigan Parole Commission—Jackson, 12:00 noon.
2. September 26, 1937—The Council, Michigan State Medical Society—Cascade Hills Country Club, Grand Rapids—6:30 P. M.
3. September 28, 1937—Cancer Committee—Hotel Pantlind, Grand Rapids—5:00 P. M.
4. September 28, 1937—County Secretaries' Conference—Hotel Pantlind, Grand Rapids—5:30 P. M.
5. September 29, 1937—Preventive Medicine Committee—Hotel Pantlind, Grand Rapids—12:00 noon.
6. September 29, 1937—Advisory Committee on Syphilis Control Program—Hotel Pantlind, Grand Rapids—12:00 noon.
7. September 30, 1937—Michigan State Medical Society Committee Chairmen for 1937-38—Hotel Pantlind, Grand Rapids—12:15 P. M.

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Dr. Wm. J. Stapleton of Detroit and daughter Sally spent their vacation in Mexico City.

* * *

The "curative" qualities of soaps and cosmetics—as advertised by their manufacturers—are now being investigated by the Federal Trade Commission.

* * *

The fifty-fifth annual meeting of the Wabash Railway Surgical Society was held September 27 and 28 at the Hotel Sherman, Chicago.

* * *

The Bay County Medical Society sponsored its Annual Ladies Night at the Bay City Country Club on Wednesday, September 22. This is an annual dinner-dance.

* * *

Dr. Walter Mercer of Webberville addressed the Ingham County Pomona Grange at Webberville

on Saturday, September 18, on the subject "The Evils of Socialized Medicine."

* * *

Dr. John E. Handy of Caro, Michigan, was guest of honor at the dinner tendered by the Tuscola County Medical Society on October 7. Dr. Handy has completed fifty years of medical practice.

* * *

According to the National Automobile Dealers' Association, low-income families offer the largest market for motor cars; the majority of present automobile-owners earn less than \$30 per week.—*News-Week*, July 31, 1937.

* * *

Senator D. Hale Brake of the 25th Senatorial District, Stanton, is to be guest of honor at the October 12th meeting of the Ionia-Montcalm County Medical Society to be held in Ionia. Senator Brake will speak on "Good Health Legislation."

* * *

The September or "Grand Rapids Number" of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY totaled 122 pages. It contained the program of the Annual Meeting and the reports to be submitted to the House of Delegates.

* * *

Mr. Wm. J. Burns, executive secretary of the Michigan State Medical Society, addressed the Exchange Club of Benton Harbor on Tuesday noon, August 31. Mr. Burns' topic was "What the Medical Society Means to Your Community."

* * *

A public speaking course for physicians interested in forensics is being arranged by the Speakers Bureau Committee of the Wayne County Medical Society. Fifty members of the Wayne County Medical Society signified their interest in such a course.

* * *

Civil Service examination for Associate Medical Officer at \$3,200 a year is announced by the Secretary of the Board of United States Civil Service Examiners. Applications must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than October 18, 1937.

* * *

The sincere thanks of the Publications Committee is extended to Mead Johnson & Company for their courtesy in relinquishing the front page of the September issue of THE JOURNAL in order that the photograph of the Civic Auditorium might be placed in this prominent position.

* * *

President Henry E. Perry announced the appointment of the following committee to serve as a Contact Committee with the Parole Commission of the State of Michigan: Drs. Philip A. Riley, chairman, Jackson; L. Fernald Foster, Bay City; R. B. Allen, Detroit; I. W. Greene, Owosso; and A. C. Furstenberg, Ann Arbor.

* * *

Representatives of the Michigan State Medical Society to the proposed Michigan Health League, to be composed of physicians, dentists, nurses, pharmacists, and interested laymen are: Dr. Ray G. Tuck, Pontiac, chairman; Dr. L. G. Christian, Lansing; Dr. T. K. Gruber, Eloise; and Dr. J. M. Robb, Detroit.

* * *

Dr. Frederick W. Robbins of Pasadena, California, visited friends and acquaintances in Detroit in September. Dr. Robbins practiced urology in Detroit up to twelve year ago, when he retired. He was, for a number of years, professor of urology at the Detroit College of Medicine and Surgery.

Dr. George Kamperman of Detroit was awarded the honorary degree of Master of Science by the University of Michigan at the commencement of the medical school. We are looking forward to the publication of Dr. Kamperman's address before the faculty and students.

* * *

"**Doctors and Public Speaking**" is the title of an article by Dr. P. A. Teschner, of the Bureau of Health and Public Instruction, American Medical Association. This is a very excellent presentation and a timely one. Copies may be secured by writing Doctor Teschner at the American Medical Association, 535 N. Dearborn Street, Chicago.

* * *

Dr. Roy D. McClure sailed on Saturday, September 11, for Italy, on his way to present a paper before the 46th Session of the French Congress of Surgery in Paris, on October 4, on "The Tannic Acid Treatment of Burns." He will illustrate his talk with colored motion pictures showing this method of treatment.

* * *

The **Beaumont Foundation Lectures** given under the auspices of the Wayne County Medical Society will be held in April, 1938, instead of February. The lecturer will be Dr. H. N. Evans, Director of the Institute of Experimental Biology, California. His general subject will be "Anterior Pituitary Physiology." The exact title as well as exact date will be announced later.

* * *

The first **West Coast meeting** of the American Academy of Orthopedic Surgeons will be held on January 16-20, 1938, at the Hotel Biltmore, Los Angeles. Special trains will be run with stop-overs at Santa Fe, the Grand Canyon, San Francisco and other points. For further information write to Robert L. Lewin, Hotel Biltmore, Los Angeles, California.

Dr. Meyer Wiener of St. Louis will address the Detroit Ophthalmological Club Wednesday, November 3, 1937, at the Wayne County Medical Society's headquarters. All the oculists of the State are invited to enjoy this lecture. A subscription dinner at 6:30 P. M. will precede the Lecture, for which reservations should be made by addressing the Cafe, care of the Wayne County Medical Society, Woodward at Canfield, Detroit.

* * *

Dr. Charles A. Teifer of Muskegon resumed practice in September, after recovery from injuries received in an automobile accident near Boyne City, the night of November 21, 1936, when he was returning from a deer hunting trip. Dr. Teifer suffered a broken back, chest and other injuries and was in the hospital at Petoskey for some time before being removed by ambulance to a Muskegon hospital. Later he was taken to his home, remaining in a cast for several months. Dr. Teifer is president-elect of the Muskegon County Medical Society.

* * *

"**The Medical Supplement**" of the Wayne County Medical Society appeared in the *Detroit Free Press* on Sunday, September 26. Congratulations to the Wayne County Medical Society on this pioneering activity in Michigan. Copies of the Medical Supplement were distributed at the Secretaries' Conference, on the occasion of the Michigan State Medical Society Convention in Grand Rapids, September 28, 1937. Mr. Lawrence C. Salter of the *Free Press* explained to those present the mechanics of developing a medical supplement.

* * *

The **Jackson County Medical Society** sponsored the Michigan State Premiere of the Camp's "Transparent Woman" in the Auditorium of the Jackson County Building, Jackson, on Thursday, September 23. President-elect Henry Cook of Flint; Council Chairman P. R. Urmston of Bay City; Secretary



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L. Fernald Foster of Bay City, and Executive Secretary Wm. J. Burns represented the State Society. Many physicians from central Michigan visited Jackson and viewed the Transparent Woman at this showing. The Transparent Woman was on exhibition for ten days.

* * *

Michigan physicians who have written scientific papers which have appeared in *The Journal of the American Medical Association* during the past summer are as follows: An article entitled "Picrotoxin in the Treatment of Barbiturate Poisoning" by E. M. Kline, M.D., Edward Bigg, M.D., H. A. K. Whitney, Ph.C., Ann Arbor, appearing July 31, 1937. "Intensive Case Finding Work in Tuberculosis" by Henry F. Vaughan, Dr.P.H., and Bruce H. Douglas, M.D., Detroit, appearing in September 4th issue. "The Incidence of Operations for Goiter in Southern Michigan," "Effect of Iodized Salt after Twelve Years General Use," by Roy D. McClure, M.D., Detroit.

* * *

Crippled and Afflicted Child Commitments for August, 1937.

Crippled Child: Total of 260 cases. Of the total number 122 went to University Hospital, and 138 to miscellaneous hospitals. From Wayne County (included in above totals): Total of 59 cases, of which 9 went to University Hospital and 50 to miscellaneous hospitals.

Afflicted Child: Total of 1,629. Of the total number, 266 went to University Hospital, and 1,363 to miscellaneous hospitals. From Wayne County (included in above totals): Total of 415 cases, of which 27 went to University Hospital and 388 went to miscellaneous hospitals.

* * *

Dr. Frank H. Lahey and Dr. Lewis M. Hurxthal of the Lahey Clinic, Boston, will bring a group of lectures on "Thyroid Disease" on Friday, November 19, 1937, in the Henry J. Doermann Theatre at the University of Toledo. This program is sponsored by The Medical Institute of the University of Toledo and is the Fourth Annual Postgraduate Day.

Doctor Lahey will discuss the surgical aspects and Doctor Hurxthal will give consideration to the medical aspects. There will be three lectures by each, the first at 10:00 a. m., afternoon lecture at 2:00 p. m., and the closing evening lecture at 8:30 p. m. All members of the Michigan State Medical Society are cordially invited to attend the Toledo University post-graduate lectures.

* * *

Edward A. Filene, Boston Department store merchant and perennial campaigner for coöperatives organized and endowed in January, 1936, the \$1,000,000 Consumers Distribution Corporation, designed to propagandize coöperative business.

Recently a contract was signed by C.D.C. with Secretary of Agriculture Henry Wallace, whereby the corporation would organize and operate all commercial enterprises in the Resettlement Administration town of Greenbelt, Maryland, which accommodates 885 families.

Consumers Distribution will be the \$14,000,000 community shopkeeper. News-Week states: "Although the C.D.C. will equip and furnish doctors' and dentists' offices, so far it has ducked the explosive question of socialized medicine."

* * *

A "Golfers Special" to the San Francisco meeting of the A. M. A. is being organized by the American Medical Golfing Association. Physicians who like golf mixed with their travel will find five games arranged on the trip out to the coast for the American Medical Association meeting of June 13, 14, 15, 16, and 17, 1938, and three games on the return trip through the Northwest. The

first game will be played in New Orleans, reached by the Steamship S. S. Dixie from New York (or via a rail itinerary) on Tuesday, June 7, 1938. Other stops include Houston, Galveston, and San Antonio, Texas; Los Angeles, Del Monte, California; and finally San Francisco, where the big American Medical Golfing Association tourney will be held Monday, June 13, 1938.

The return trip includes games at Portland, Oregon; Seattle, Washington; Vancouver, B.C.; Lake Louise and Banff, with stops at Saint Paul and Chicago.

For full particulars write Dr. Walt P. Conaway, 1723 Pacific Avenue, Atlantic City, N. J., president of the American Medical Golfing Association.

* * *

The thanks of the Michigan State Medical Society are due the following physicians who made a ten-day tour of the county medical societies of the Upper Peninsula during the month of August, to bring them messages of the Michigan State Medical Society, its activities, its program for the future. The 2,000 mile tour was taken by President Henry E. Perry, Newberry; President-elect Henry Cook, Flint; Secretary L. Fernald Foster, Bay City; Council Chairman P. R. Urmston, Bay City; and Executive Secretary Wm. J. Burns, Lansing. Five of the ten cities were visited by Councilor Roy H. Holmes of Muskegon, Delegate Louis J. Hirschman of Detroit and immediate Past-president Grover C. Penberthy of Detroit.

The Luce and Schoolcraft County Medical Societies "State Society Night" was addressed by Dr. L. G. Christian, Lansing, chairman of the Legislative Committee; Dr. Philip A. Riley, Jackson, vice-speaker of the House of Delegates; Dr. E. D. Crowley, Jackson, president of the Jackson County Medical Society. The Menominee County Medical Society was addressed by Dr. J. Earl McIntyre of the State Board of Registration in Medicine, Lansing.

* * *

Twelfth Annual Clinic of the Highland Park Physicians' Club

A group of excellent medical speakers has been assembled that promises to make the 12th Annual Clinic of the Highland Park Physicians' Club a long-remembered and fruitful meeting to the many who will attend. Wednesday, December 1, is the date of the clinic this year.

The following men have signified their participation and topics:

Dr. Kellogg Speed—Fractures of the Spine.
Dr. C. F. Dixon—Surgical Lesions of the Colon.
Dr. John Dees—Sulfanilamid in Gonococcal Infections.
Dr. A. F. Lash—Puerperal Sepsis.
Dr. Samuel Iglauer—Deep Infections of the Neck.
Dr. I. M. Rabinowitch—Diabetes Mellitus.

The Highland Park General Hospital will be the meeting place, and a complimentary luncheon will be served by the hospital. A banquet at the Statler Hotel in the evening will close the day, at which Dr. Rabinowitch will speak on his recent trip into the Far North on a study of disease among the Eskimos. A complete program will be published in the November issue of THE JOURNAL.

* * *

Northern Tri-State Medical Society

The executive officers of the Northern Tri-State Medical Society met at their annual executive meeting at the Detroit Boat Club, where they were entertained at dinner by Dr. William M. Donald, on August 22, 1937. Dr. C. E. Umphrey, president of the Wayne County Medical Society, was present as honor guest, and extended a welcome on behalf of the local society. The officials present were: Dr. G. E. Jones, president, of Lima, Ohio; Dr. Robert H. Elrod, of Toledo, secretary; Dr. L. T.



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Rawles of Fort Wayne, Indiana; Dr. D. R. Brasie of Flint, Michigan; Dr. O. P. Klotz of Findlay, Ohio; Dr. W. W. Beauchamp of Lima, Ohio; Dr. W. H. Marshall of Flint, Michigan; Dr. G. O. Larson of LaPorte, Indiana, and Dr. J. N. Kelly of LaPorte, Indiana. Findlay, Ohio, was selected as the meeting place for the 1938 meeting, the local county society having extended a pressing invitation to be permitted to act as hosts. A brilliant skeleton program was worked out with a list of speakers of national prominence, and it was agreed that the outlook for 1938 was of a very high character.

* * *

Excerpt from Boake Carter's Philco Broadcast of July 28, 1937: "Today bearded Senator Ham Lewis of Illinois proposed a resolution which would require all physicians, surgeons and hospitals in the nation to give aid to any poor person without financial means and then send the bill to the Government. The Lewis proposal regarding doctors treating impoverished people and sending the bill to the Social Security Board, seems to be a gratuitous and somewhat insulting slap at the medical profession in general. If anyone could ever compile, from every doctor in the nation, a list of the number of cases of free treatment each medical man gives per year, it would reveal that physicians and surgeons probably do more to help relieve human suffering without asking a dime for their services than any other one group of human individuals. There are, of course, exceptions to the rule, as there are in every case, but I believe a guess that 90 per cent are not Shylocks is not an unreasonable guess. The Lewis resolution would provide heavy penalties for anyone who pretended he was broke in order to get such treatment. Think of the huge

army of jobholders that would be necessary to investigate. Consider the Treasury-wrecking subsidies that would be required to support such a scheme. Day by day, in every way, it seems, the Government is becoming more and more paternalistic, with all its attendant colossal increase in costs—but this is about the gaudiest piece of paternalism ever proposed in the halls of the United States Congress."

* * *

In the July 5 issue of the *Cincinnati Times-Star* the following editorial appeared:

"Misplaced Demagoguery—"It's a damned outrage," shouts Representative Maury Maverick from the pages of a book he has just published, 'that a poor man can't go to a doctor. Why can't every man be operated upon when he needs it? Why should people watch their children die? Why should a man in moderate circumstances have to die because he hasn't got the money for an operation and hospital expenses?'"

"Such fulminations as these could come only from a politician well schooled in the gentle art of demagoguery, but sublimely ignorant of the fact. Everyone knows, including perhaps Mr. Maverick, that he is talking through his hat. It is a celebrated truth that during the depression the medical profession went broke, or almost so, because a great proportion of its services were completely unremunerated. It is no less true that in all times doctors charge, or do not charge, according to ability to pay. Nor can we think of a hospital, even those operated on endowments left by the hard-hearted rich, which turns away the sick just because they are poor.

"If Mr. Maverick wants to play the demagogue, his heart-rending baloney can find a greater similitude of truth in other fields."

The Editor of the *Times-Star* is to be congratulated. An editorial of this kind is of great service in making clear to the public the unsound viewpoint of reformers who mistakenly think they are solving the problem of adequate distribution of medical care by schemes for regimenting doctors and patients. It makes no difference whether the scheme is some plan for compulsory health insurance operated privately or a plan for state medicine supported by taxes and managed by politicians. Either method has but one result—deterioration in the quality of medical care.

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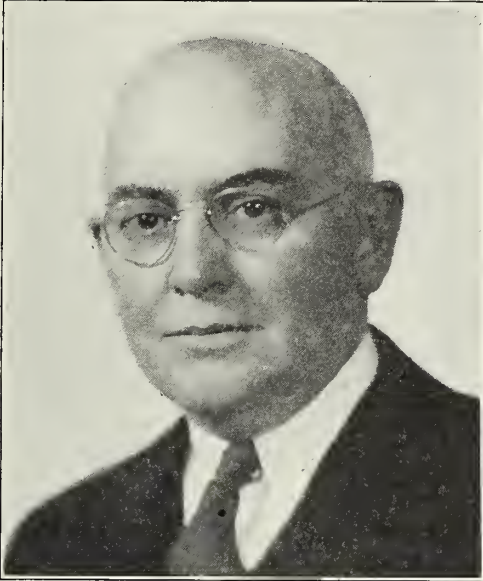
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**DR. L. G. CHRISTIAN OF LANSING
GETS STATE POST**

GOVERNOR FRANK MURPHY announced, on August 13, the appointment of Dr. Leo Gregory Christian of Lansing to the New State Hospital Commission.

Dr. Christian, chairman of the Legislative Committee of the Michigan State Medical Society, was a leader in the society's work to have the 1937 legislature pass the Basic Science Law, medical relief legislation, the Prenuptial Physical Examination Law, the statute permitting the teaching of social hygiene in the public schools, and other good health laws.



DR. L. G. CHRISTIAN

Dr. Christian was honored by the Ingham County Medical Society at its July meeting for his work. A resolution was unanimously adopted expressing the Society's appreciation, and a Tiffany watch was presented to him. The Ingham County Society dedicated its July *Bulletin* to Dr. Christian.

The Council of the Michigan State Medical Society, at its meeting of August 11, extended to Dr. Christian an earnest expression of its appreciation and gratitude for his work, zeal and service to the public and to Michigan Medicine.

The House of Delegates of the Michigan State Medical Society, at its Grand Rapids session, presented a scroll to the delegate from Lansing which read as follows:

To LEO GREGORY CHRISTIAN, M.D.

In Recognition of his Services to Humanity and to Medicine
Michigan State Medical Society

By Henry E. Perry, M.D., President

L. Fernald Foster, M.D., Secretary

September twenty-seventh
Nineteen Hundred Thirty-Seven

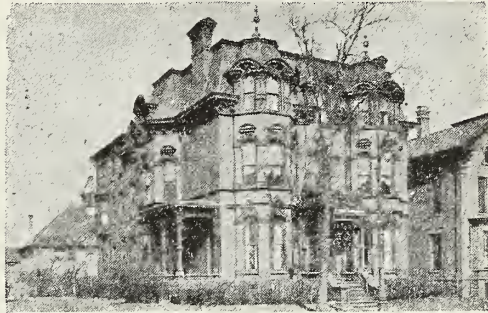
On the State Hospital Commission, Dr. Christian will confine his work to the medical phases of the Michigan institutions. The position is one of honor, and carries no remuneration. The board meets at least once a month, and inspects all state hospitals each year.

The congratulations of the Michigan State Medical Society are extended to Commissioner Christian, and best wishes for full success in his efforts to improve our state hospitals.

OCTOBER, 1937

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Medical Society Exempt under Federal Internal Revenue Laws

The following letter was received from the Commissioner of Internal Revenue, Treasury Department, Washington, D. C., by the Wayne County Medical Society, granting the society's petition for exemption under the Internal Revenue Laws, as a scientific, educational, charitable, non-profit association. This is a valuable precedent and may be of some assistance to other county medical societies of the state as well as other parts of the United States:

September 4, 1937

"Wayne County Medical Society
4421 Woodward Avenue
Detroit, Michigan

Sirs:

"Reference is made to the evidence submitted by you in support of your claim to exemption from the payment of taxes imposed by the Social Security Act. Previous to ruling upon your status for social security tax purposes, it is deemed advisable to determine your status for Federal income tax purposes.

"The evidence transmitted discloses that you were incorporated under the laws of the State of Michigan in 1910. Your purposes are 'To promote social intercourse between the physicians of Wayne County; to encourage the interchange of views and discussion of all matters affecting their professional calling and work; in the investigation of all questions and the dissemination of useful knowledge pertaining and necessary to the advancement and promotion of science and public health; and to acquire and hold real and personal property as shall be necessary for a proper maintenance and conduct of its affairs.'

"Your activities are scientific, educational and charitable, including:

- (1) Medical Aid and Dental Aid offices where medical and dental care are provided for the unemployed.
- (2) A Medical Service Bureau where complete medical care is given to the underprivileged of Detroit and Wayne County.
- (3) A Medical-Dental Bureau where free care is given to the unemployed on welfare,
- (4) A tumor Registry, a public health function,
- (5) An office of The McGregor Foundation for aiding the underprivileged in rehabilitation and medical problems and
- (6) A Teaching Center and Branch Office of the Visiting Nurse Association.

"Your work is administered by sixty committees. Your scientific activities consist of:

1. Weekly meetings at which valuable postgraduate lectures and demonstrations are presented for members of the society.
2. The Noon Day Study Club, a group of several hundred younger members of the society, holds weekly scientific postgraduate course from September to June.
3. A postgraduate course in coöperation with the Michigan State Medical Society and Extension Division of the University of Michigan, in various fields of medicine.
4. A lectureship Foundation Committee of the society presents an annual series of postgraduate talks, presenting such men as James Ewing, Charles F. Doan, Robert B. Osgood, Professor Mayo and Professor Plumer.

"Your income is derived from membership dues and it is expended for general maintenance and operating expenses.

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"Based on the facts presented, it is held that you are entitled to exemption under the provisions of section 101 (6) of the Revenue Act of 1936, and the corresponding provisions of prior revenue acts. You are not, therefore, required to file returns for 1936 and prior years. Returns will not be required for subsequent years so long as there is no change in your organization, your purposes, or your method of operation.

"Any changes in your form of organization or method of operation, as shown by the evidence submitted, must be immediately reported by you to the collector of internal revenue for your district in order that the effect of such changes upon your present exempt status may be determined.

"The exemption granted in this letter does not apply to taxes levied under other titles or provisions of the respective revenue acts, except insofar as exemption is granted expressly under those provisions to organizations enumerated in section 101 of the Revenue Act of 1936 and the corresponding sections of prior revenue acts.

"Contributions made to your organization by individual donors are deductible by such individuals in arriving at their taxable net income in the manner and to the extent provided by section 23 (o) of the Revenue Act of 1936 and the corresponding provisions of prior revenue acts. The deductibility of contributions by corporations is governed by section 23 (q) of the Revenue Act of 1936.

"A copy of this letter is being transmitted to the collector of internal revenue of your district.

"The question of your exemption from the payment of taxes imposed by the Social Security Act will be made the subject of a separate communication.

"By direction of the Commissioner.
(Signed) CHAS. T. RUSSELL, Deputy Commissioner."

* * *

INTERNATIONAL MEDICAL ASSEMBLY INTER-STATE POSTGRADUATE MEDICAL ASSOCIATION OF NORTH AMERICA

St. Louis, Missouri
October 18, 19, 20, 21, 22, 1937

PROGRAM

Monday, October 18

Diagnostic Clinic: "Cosmetic Results in the Treatment of Cancerous Skin Lesions."

Dr. Joseph Eller, Professor of Clinical Dermatology and Syphilology, New York Postgraduate Medical School, Columbia University, New York, N. Y.

Diagnostic Clinic: "Hypertensive Heart Disease, Manifestations, Diagnosis, Treatment."

Dr. Fred M. Smith, Professor of Theory and Practice of Medicine, State University of Iowa College of Medicine, Iowa City, Iowa.

Diagnostic Clinic: "Deficiency Diseases."

Dr. Russell L. Haden, Chief of Medical Division, Cleveland Clinic, Cleveland, Ohio.

Diagnostic Clinic: "The Symptoms and Treatment of Injuries of the Spinal Cord."

Dr. Loyal Davis, Professor of Surgery, Northwestern University School of Medicine, Chicago, Illinois.

Diagnostic Clinic: "Types of Obesity and Their Treatment."

Dr. Reginald Fitz, Associate Professor of Medicine, Boston University Medical School, Boston, Mass.

Diagnostic Clinic: "Surgical Treatment of Peptic Ulcer."

Dr. Donald C. Balfour, Professor of Surgery,

OCTOBER, 1937

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GENERAL NEWS AND ANNOUNCEMENTS

University of Minnesota Graduate School of Medicine, Mayo Clinic, Rochester, Minn.
Address: "Ulcerative Colitis and Its Surgical Management."

Dr. Richard B. Cattell, Lahey Clinic, Boston, Massachusetts.

Address: "The Roentgen Treatment of Infections."

Dr. Frederick M. Hodges, Professor of Clinical Radiology, Medical College of Virginia, Richmond, Virginia.

Address: "Meningitis Secondary to Disease of the Bones of the Skull."

Dr. Wells P. Eagleton, Newark, New Jersey.

Address: "The Treatment of Urinary Infections in Infants and Children."

Dr. John R. Caulk, Professor of Clinical Genito-Urinary Surgery, Washington University School of Medicine, St. Louis, Missouri.

Address: "Prenatal Care."

Dr. Otto H. Schwarz, Professor of Obstetrics and Gynecology, Washington University School of Medicine, St. Louis, Missouri.

Address: "Granulomatous Lesions of the Intestines."

Dr. Claude F. Dixon, Assistant Professor of Surgery, University of Minnesota Graduate School of Medicine, Mayo Clinic, Rochester, Minn.

Address: "Recent Advances in the Field of Abdominal Surgery."

Mr. W. Hugh Cowie Romanis, F.R.C.S., Surgeon to St. Thomas Hospital, London, England.

Address: "The Influence of Drugs upon the Physiology of the Failing Heart."

Dr. Maurice B. Visscher, Professor of Physiology and Head of the Department, University of Minnesota Medical School, Minneapolis, Minnesota.

Address: "The Mechanism and Treatment of Congestive Heart Failure."

Dr. Tinsley R. Harrison, Associate Professor of Medicine, Vanderbilt University School of Medicine, Nashville, Tennessee.

Address: "The Diagnostic Significance of Abdominal Pain."

Dr. Frederick J. Kalteyer, Clinical Professor of Medicine, Jefferson Medical College, Philadelphia, Pennsylvania.

Address: "Carcinoma of the Stomach."

Dr. Waltman Walters, Professor of Surgery, University of Minnesota Graduate School of Medicine, Mayo Clinic, Rochester, Minnesota.

Address: "Chronic Prostatitis."

Dr. Cyrus E. Burford, Professor of Urology, St. Louis University School of Medicine, St. Louis, Missouri.

Tuesday, October 19

Diagnostic Clinic: "The Effects of General Infection on the Nervous System of Children."

Dr. Bronson Crothers, Assistant Professor of Pediatrics, Harvard University Medical School, Boston, Mass.

Diagnostic Clinic: "Spastic Paralysis."

Dr. Alan deForest Smith, Clinical Professor of Orthopedic Surgery, Columbia University College of Physicians and Surgeons, New York, N. Y.

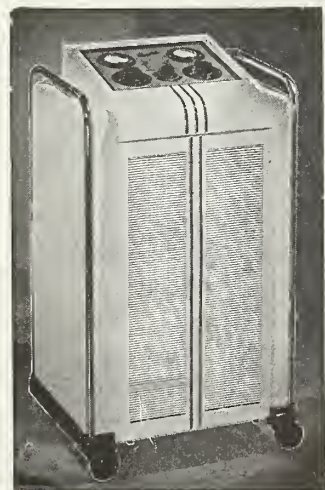
Diagnostic Clinic: (Subject to be supplied.)

Dr. Dean D. Lewis, Professor of Surgery, Johns Hopkins University School of Medicine, Baltimore, Maryland.

Diagnostic Clinic: "Pitfalls in the Diagnosis of Acute Abdominal Conditions."

Dr. Alton Ochsner, Professor of Surgery, Tulane

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Washington University School of Medicine, St.
Louis, Missouri.
Diagnostic Clinic: "The Management of Compound
Fractures of the Extremities."
Dr. John J. Moorhead, Professor of Clinical Sur-
gery, New York Postgraduate Medical School,
Columbia University, New York, N. Y.
Address: "Migraine."
Dr. Thomas Cecil Hunt, St. Mary's Hospital, Lon-
don, England.
Address: "Cicatrizizing Enteritis—A Neglected Clin-
ical Entity."
Dr. Elliott C. Cutler, Moseley Professor of Sur-
gery, Harvard University Medical School, Bos-
ton, Mass.
Address: "The Problem of Ocular Tuberculosis."
The Joseph Schneider Foundation Presentation.
Dr. Alan C. Woods, Acting Professor of Ophthal-
mology, Johns Hopkins University School of
Medicine, Baltimore, Md.
Address: "Combined Abdomino-perineal Resection
for Carcinoma of the Rectum."
Dr. Thomas E. Jones, Cleveland Clinic, Cleveland,
Ohio.
Address: "Early Diagnosis and Treatment of Can-
cer of the Cervix."
Dr. John R. Fraser, Professor of Obstetrics and
Gynecology, McGill University Faculty of Medi-
cine, Montreal, Canada.
Address: (Subject to be assigned.)
Dr. Marion L. Klinefelter, St. Louis, Missouri.
Address: "Growth Disturbances of the Pelvis and
Femur Resulting from Diseases of the Hip
Joint."
Dr. Dallas B. Phemister, Professor of Surgery,
University of Illinois College of Medicine, Chi-
cago, Illinois.
Address: "The Post Hoc Ergo Propter Hoc
Fallacy in Medicine."
Dr. Robert D. Rudolf, Professor Emeritus of
Therapeutics, University of Toronto Faculty of
Medicine, Toronto, Canada.
Address: "Allergy as Related to the Otolaryngol-
ogist."
Dr. Harold G. Tobey, Boston, Massachusetts.
Address: "Newer Methods in the Medical Treat-
ment of Peptic Ulcer."
Dr. Horace W. Soper, St. Louis, Missouri.
Address: "Subdural Hematoma."
Dr. Eric Oldberg, Professor of Neurology and
Neurological Surgery, University of Illinois
College of Medicine, Chicago, Illinois.
Address: "Toxemias of Pregnancy."
Dr. Nicholson J. Eastman, Professor of Obstetrics,
Johns Hopkins University School of Medicine,
Baltimore, Maryland.

Wednesday, October 20

Diagnostic Clinic: "Hay Fever."
Dr. J. Harvey Black, Professor of Preventive
Medicine, Baylor University College of Medi-
cine, Dallas, Texas.
Diagnostic Clinic: "Newer Methods of Vascular
Surgery."
Dr. Wayne Babcock, Professor of Surgery and
Clinical Surgery, Temple University School of
Medicine, Philadelphia, Pa.
Diagnostic Clinic: "Bronchiectasis and Certain
Phases of Tuberculosis."
Dr. Charles R. Austrian, Associate Professor of

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Dr. Walter C. Alvarez, Professor of Medicine, University of Minnesota, The Mayo Foundation, Rochester, Minn.

Diagnostic Clinic: "Syphilis of the Central Nervous System."

Dr. Leon H. Cornwall, Associate Professor of Neurology, Columbia University College of Physicians and Surgeons, New York, N. Y.

Diagnostic Clinic: "Abdominal Pain."

Dr. Irvin Abell, Clinical Professor of Surgery, University of Louisville School of Medicine, Louisville, Kentucky.

Address: "Drugs in the Treatment of Heart Disease."

Dr. Robert L. Levy, Professor of Clinical Medicine, Columbia University College of Physicians and Surgeons, New York, N. Y.

Address: "Diagnosis and Treatment of Brain Abscess."

Dr. Walter E. Dandy, Adjunct Professor of Neurological Surgery, Johns Hopkins University School of Medicine, Baltimore, Maryland.

Address: "X-ray Treatment of the Pituitary Gland."

Dr. Merrill C. Sosman, Assistant Professor of Roentgenology, Harvard University Medical School, Boston, Mass.

Address: "Water Balance in Surgical Patients with Special Reference to Pre- and Postoperative Management."

Dr. Frederick P. Collier, Professor of Surgery, University of Michigan Medical School, Ann Arbor, Michigan.

Address: "Anxiety States in General Practice."

Dr. William J. Kerr, Professor of Medicine, University of California Medical School, San Francisco, California.

Thursday, October 21

Diagnostic Clinic: "Cirrhosis of the Liver."

Dr. Charles A. Elliott, Professor of Medicine, Northwestern University School of Medicine, Chicago, Illinois.

Diagnostic Clinic: "Factors to be Considered in the Diagnosis of Diseases of the Genito-Urinary Tract."

Dr. William E. Lower, Cleveland Clinic, Cleveland, Ohio.

Diagnostic Clinic: "Nephritis."

Dr. Jonathon C. Meakins, Professor of Medicine, McGill University Faculty of Medicine, Montreal, Canada.

Diagnostic Clinic: "Postoperative Fistulae with Special Reference to the Gall-Bladder."

Dr. John F. Erdmann, Attending Surgeon, New York Postgraduate Hospital and Medical School, Columbia University, New York, N. Y.

Diagnostic Clinic: "The Relation of Diabetes to Arteriosclerosis."

Dr. Elliott P. Joslin, Clinical Professor of Medicine, Harvard University Medical School, Boston, Mass.

Address: "A New Approach to the Treatment of Peptic Ulcer."

Mr. Wilson Hey, F.R.C.S., Surgeon, Manchester Royal Infirmary, Manchester, England.

Address: "The Present Status of Studies on the Thymus."

Dr. Leonard G. Rowntree, Director, Philadelphia Institute for Medical Research, Philadelphia, Pa.

Address: "The Adherent Posterior Duodenal Ulcer."

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Dr. Ralph A. Kinsella, Professor of Internal Medicine, St. Louis University School of Medicine, St. Louis, Missouri.

Address: "Recent Advances in Hormone Therapy as Applied to Gynecological Problems."

Dr. Emil Novak, Associate in Gynecology, Johns Hopkins University School of Medicine; Associate Professor of Obstetrics, University of Maryland School of Medicine, Baltimore, Maryland.

Address: "The Surgical Treatment of Diverticulitis."

Dr. Fred W. Rankin, Lexington, Kentucky.

Address: "Diagnosis and Treatment of Displacements of the Uterus."

Dr. William H. Vogt, Director of the Department of Gynecology and Obstetrics, St. Louis University School of Medicine, St. Louis, Mo.

Address: "The Relation of the Development of the Child to the Endocrine System."

Dr. Charles R. Stockard, Professor of Anatomy, Cornell University Medical College, New York, N. Y.

Address: "Indications for Exploratory Laparotomy."

Dr. William T. Coughlin, Professor of Surgery, St. Louis University School of Medicine, St. Louis, Mo.

Address: "Tumors of the Kidney."

Dr. Herman L. Kretschmer, Clinical Professor of Surgery, Rush Medical College, University of Chicago, Chicago, Ill.

Friday, October 22

Diagnostic Clinic: "Surgical Lesions of the Common and Hepatic Ducts."

Dr. Frank H. Lahey, Director of Surgery, Lahey Clinic; Surgeon to the New England Baptist Hospital and the New England Deaconess Hospital, Boston, Mass.

Diagnostic Clinic: "The Diagnosis and Management of Cardiac Arrhythmias."

Dr. Roy W. Scott, Professor of Clinical Medicine, Western Reserve University School of Medicine, Cleveland, Ohio.

Diagnostic Clinic: "Chest Surgery."

Dr. Evarts A. Graham, Bixby Professor of Surgery, Washington University School of Medicine, St. Louis, Missouri.

Diagnostic Clinic: "The Medical Treatment of Arthritis."

Dr. Cyrus C. Sturgis, Professor of Internal Medicine, University of Michigan Medical School, Ann Arbor, Michigan.

Diagnostic Clinic: "Diagnosis and Management of Diseases of the Thyroid Gland."

Dr. George Crile, Cleveland Clinic, Cleveland Ohio.

Address: "The Surgical Treatment of Arthritis."

Dr. Philip D. Wilson, Clinical Professor of Orthopedic Surgery, Columbia University College of Physicians and Surgeons, New York, N. Y.

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Dr. W. McK. Craig, Professor of Neurosurgery, University of Minnesota Graduate School of Medicine, Mayo Foundation, Rochester, Minnesota.

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Dr. Alfred W. Adson, Professor of Neurosurgery, University of Minnesota Graduate School of Medicine; Senior Neurosurgeon of Mayo Clinic, Rochester, Minn.

Address: "Diagnosis and Treatment of Pneumonia."

Dr. Russell L. Cecil, Professor of Internal Medicine, New York Polyclinic Medical School and Hospital, New York, N. Y.

Address: "The Significance of Hoarseness and Local Discomfort in Laryngeal Disease."

Dr. Gabriel Tucker, Professor of Clinical Bronchoscopy and Esophagoscopy, University of Pennsylvania School of Medicine, and Professor of Bronchoscopy and Laryngeal Surgery, Graduate School of Medicine, University of Pennsylvania, Philadelphia, Pa.

Address: "The Surgery of Hermaphroditism and Associated Adrenal Diseases."

Dr. Hugh H. Young, Professor of Urology, Johns Hopkins University School of Medicine, Baltimore, Maryland.

Address: "The Menace of Postoperative Adhesions."

Dr. Fred W. Bailey, St. Louis, Missouri.

To America's Schools—YOUR HEALTH!

Once more, during the coming fall, winter and spring, the Voices of Medicine will salute the people of America, with the toast "YOUR HEALTH." This is the well-known title of the radio program of the American Medical Association and the National Broadcasting Company. The coming season will be the fifth; the first two years were devoted to health talks, and the last two seasons to dramatized health messages. This year, the salutation will be addressed particularly to the teachers and students in the Junior and Senior high schools, in the hope that the program will be helpful in illustrating, amplifying, and enriching the health in those schools. The program will be on the air while schools are in session, so that the program may be utilized directly in the thousands of schools which now have or soon will have radio and public address systems reaching the class-rooms. Programs will be announced in advance in *The Journal of the American Medical Association*. While the program is planned especially for high schools, it will not sacrifice the interest which it has held for listeners in the home. To teachers, students and stay-at-homes, the American Medical Association and the National Broadcasting Company will address their message of health education with the familiar musical theme HALE AND HEARTY, written especially for the program, and the toast, "To America's Schools, YOUR HEALTH."

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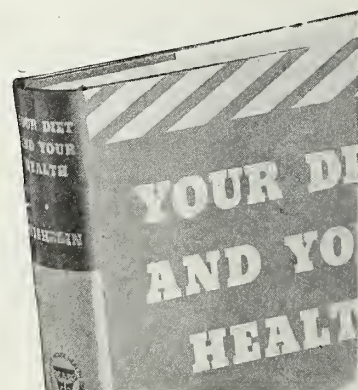
The book gives full discussions of the proportions of protein, carbohydrate, fat recommended; the value and use of minerals; the real importance of the much-touted vitamins; the merits of the various weight-reduction diets, and many other topics. There are also special sections on suggested diets; food "sensitivities"; and in general much good common sense on a subject which has been peculiarly obscured by fads.

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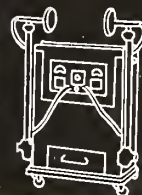
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TEXTBOOK OF GENERAL PHYSIOLOGY, by T. Cunliffe Barnes, D.Sc., Assistant Professor of Biology, Yale University. 555 pp. 165 ill. Phila., P. Blakiston's Son & Co., Inc., 1937. \$4.50.

* * *

LABORATORY MANUAL OF GENERAL PHYSIOLOGY, By T. Cunliffe Barnes, D.Sc., Assistant Professor of Biology, Yale University. 116 pp. Phila., P. Blakiston's Son & Co., Inc., 1937. \$1.00.

Unlike the traditional medical school physiology, this work on general physiology deals predominantly with basic cellular phenomena in functions of cold-blooded animals. Such subjects as diffusion, osmosis, permeability, water, cell movement, muscle contraction, nerve action, bioelectric phenomena and thermal characteristics form the main subjects of discussion. It is now many years since the last edition of Bayliss' classic work on general physiology appeared, and much subsequent research has amplified the field. The present text is an effective presentation for college and pre-medical students. It presumes some knowledge of physical and colloidal chemistry on the part of the reader. Throughout, basic physical, chemical and thermodynamical principles are emphasized in relation to physiological processes. The student's attention is constantly called to the results of recent research; references to approximately one thousand titles are made and nearly ninety per cent relate to publications of the past decade—an admirable supplement to Bayliss.

The laboratory manual which purports to cover a year course suggests procedures, asks questions as to results obtained and refers to the original publication in which the experiments were first reported. Both text and manual should form the basis to a stimulating course in general physiology, and the medical student with such a background should be admirably prepared for the mammalian and human physiology of his medical course.

THE LABORATORY DIAGNOSIS OF SYPHILIS. The Theory, Technic, and Clinical Interpretation of the Wassermann and Flocculation Tests With Serum and Spinal Fluid, by Harry Eagle, M.D., Past Assistant Surgeon, United States Public Health Service, Washington, D. C.; Lecturer in Medicine, Johns Hopkins University Medical School, Baltimore, Md.; Formerly Assistant Professor of Bacteriology, University of Pennsylvania Medical School. With Foreword by J. Earle Moore, M.D., Associate in Medicine, Johns Hopkins University; Physician in Charge, Syphilis Division of the Medical Clinic, and Assistant Visiting Physician, Johns Hopkins Hospital, Baltimore, Maryland. St. Louis: The C. V. Mosby Company, 1937. Price: \$5.00.

This work on The Laboratory Diagnosis of Syphilis is a very complete and up-to-date book, containing over 400 pages. In view of the anti-syphilis campaign throughout the United States, the volume is, to say the least, timely.

PHYSICAL DIAGNOSIS. By Don C. Sutton, M.S., M.D., Associate Professor of Medicine, Northwestern University School of Medicine, Attending Physician and Chairman of the Medical Division of the Cook County Hospital; Chief of the Cardiac Clinic, Cook County Hospital, Chicago, Attending Physician, The Evanston Hospital. With 298 Text illustrations and 8 Colored Plates. St. Louis: The C. V. Mosby Co., 1937.

In this work of 460 pages of subject matter the author has presented an admirable outline of facts to be learned through careful Diagnostic Medicine. In large easily readable type, he rapidly reviews the history of the Art of Physical Diagnosis, Meth-

ods of Physical Examination, Facts to be covered in History Taking, General Examination data to be looked for, with abundant illustrations. One half of the book deals with the examination of chest, lungs and heart. The abdominal and nervous system examinations are likewise concisely and clearly covered in a very refreshing manner. For a reference and review, this volume would be a most valuable addition to any physician's library.

RECENT ADVANCES IN PULMONARY TUBERCULOSIS. By L. S. Burrell, M.D., (Cantab), F.R.C.P., London, Third Edition, with 48 plates and 22 text figures. Philadelphia, P. Blakiston's Son & Co., Inc., 1937.

Tuberculosis at times assumes more than ordinary importance particularly when concerted efforts are exerted towards the elimination of the disease as in this state. Diphtheria, scarlet fever and smallpox together with typhoid, play a very minor rôle as the cause of death. They are well under control. Cancer, tuberculosis and syphilis are to the front, hence any up-to-date book on one of these subjects is a valuable contribution. The present volume discusses among other things, the subjects of prevention, diagnosis, radiology, childhood tuberculosis, and the various methods of treatment. The author writes: "Enormous advances have been made in surgical treatment, and the significance of cavities is now fully appreciated and yet the modern tendency is to avoid drastic surgical intervention if possible and to substitute partial for complete thoracoplastic operations."

THE 1937 YEAR BOOK OF RADIOLOGY. Diagnosis edited by Charles A. Waters, M.D., Associate in Roentgenology, Johns Hopkins University; Assisting Visiting Roentgenologist, Johns Hopkins Hospital. Associate Editor, Whitmer B. Firor, M.D., Assistant in Roentgenology, Johns Hopkins University; Assistant in Roentgenology, John Hopkins Hospital. Therapeutics edited by Ira I. Kaplan, B.Sc., M.D., Director, Division of Cancer, Department of Hospitals, City of New York. The Year Book Publishers, Inc., 304 S. Dearborn Street, Chicago, 1937. Price, \$4.50.

The 1937 Year Book on Radiology is an up-to-the minute survey of that subject, namely, radiologic diagnosis and radiotherapy. The standing of the authors is sufficient evidence that the material in the work is wisely selected and that the work is in reality a survey of the most recent advances in the two-fold subject. We have a full description of the kymograph and also of tomography, which are so recent that they have not found their way into the majority of x-ray laboratories. In the diagnostic part of the work, the plan is to follow different systems of the body. In addition to this, there are chapters on technic, the teaching and principles and practice of radiologic diagnosis as well as the medico-legal phase which is always with us. Dr. Kaplan, as in former editions, handles the subject of radiotherapy. Not only the specialist in radiotherapy and radiodiagnosis, but those in general practice or in other specialties will find this work valuable as a presentation of the accomplishments of radiology.

MATERIA MEDICA, TOXICOLOGY AND PHARMACOGNOSY. By William Mansfield, A.M., Phar.D., Dean and Professor of Materia Medica and Toxicology, Union University, Albany College of Pharmacy, Albany, N. Y., with 202 Illustrations. St. Louis: The C. V. Mosby Company, 1937.

This is largely a list of the drugs which are included in the United States Pharmacopœia and the National Formulary and gives many of their physical and chemical properties, together with their uses and dosages. Poisons are classified according to their action. The preparations most commonly avail-

(Continued on page 800)

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(Continued from page 798)

able are listed. Their toxic symptoms and proper treatment of cases of poisoning is described.

As a reference this book will be valuable to those who desire information quickly available.

AN INTRODUCTION TO DERMATOLOGY. By Richard L. Sutton, M.D., Sc.D., LL.D., F.R.S. (Edin.), Professor of Dermatology, University of Kansas School of Medicine; and Richard L. Sutton, Jr., A.M., M.D., L.R.C.P. (Edin.), instructor in Dermatology, University of Kansas School of Medicine. Third Edition. St. Louis: The C. V. Mosby Company, 1937.

This work is intended primarily for students. The authors have attempted to include only the essentials of dermatology upon which the student may build a knowledge of its fundamentals, leaving him free from the confusion inevitable if required to sift and cull his information from a more replete reference book.

Dermatologic conditions are classified according to the latest conceptions and the descriptions are clear and concise. Several new diseases are described here for the first time. The section on syphilis has been enlarged and the modern methods of treatment are stressed.

CLINICAL ALLERGY. By Louis Tuft, M.D., Chief of Clinic of Allergy and Applied Immunology, Temple University Hospital; Associate in Immunology, Temple University School of Medicine; Director of Laboratories, Pennsylvania Department of Health, Philadelphia. Introduction by John A. Kolmer, M.D., Dr.P.H., D.Sc., LL.D., L.H.D., Professor of Medicine, Temple University; Director of Research Institute of Cutaneous Medicine, Philadelphia. 711 pages with 82 illustrations. Cloth \$8.00 net. Philadelphia and London: W. B. Saunders Company, 1937.

Allergy as a special branch of immunology has developed very rapidly during the past twenty years. The present work presents these advances in a form in which the general practitioner may profit. Among the subjects discussed are the fundamental principles of allergy, the basic etiologic types responsible for most of the allergic conditions characteristic manifestations of allergy except those affecting the skin and lastly those allergic conditions which affect the skin. This book gives a fair presentation of the subject of allergy by an expert. Allergic conditions are apt to affect the fields of nearly all specialties. This book should therefore interest not only the dermatologist but others confining their attention to special lines of work, and the general practitioner most of all.

THE ROENTGENOLOGIST IN COURT. By Samuel Wright Donaldson, A.B., M.D., F.A.C.R., Roentgenologist of St. Joseph's Mercy Hospital, Ann Arbor. Published by Charles Thomas, Springfield, Ill. Price \$4.00.

Probably the majority of physicians have a horror of being summoned to appear in court. The feeling is not due to time taken off from their practice, as often given as an explanation, so much as a fear complex. One way of overcoming fear is accurate knowledge of one's duties and limitations in giving court testimony. A person is not in the best sense equipped for his calling, professional or other, if he is not conversant with his legal relation to those with whom he deals. This is as true of the physician as of the business man; but it does not mean that either must know enough of the law to be his own lawyer. Dr. Donaldson in a brief concise book on the subject, "The Roentgenologist in Court," provides the necessary information which, if mastered, will make the hour or the day in court, as the case may be, a pleasant rather than embarrassing experience. While the roentgenologist is called to court in this day and age of accidents more frequently than any other physician, what the author has written will be of value to any practicing physician. The

work is written in the clear, forceful style of which Dr. Donaldson is capable. The book is profusely documented, which makes it useful also to the trial attorney who pleads medico-legal cases. It is the result of years of study of the law in its relation to medicine and particularly to roentgenology. Dr. Donaldson has interested himself in the legal phases of the radiologist's work over a long period of time, during which he has watched and recorded court decisions on the subject. Among the topics discussed at length are the Relationship of Physician and Patient, Malpractice, The Physician and the Law of Agency, Malpractice Defense and Prophylaxis, Evidence and Testimony, Expert Witness Fees, Films as Evidence, Ownership of Films, Physician and Contracts, "Doctor Take the Stand." These subjects concern every practitioner of medicine, but the roentgenologist most of all, for his work includes certain aspects of all other specialties and general surgery and general medicine as well. All these subjects are of immense interest, but to everyone, whether confining his work to x-ray or not, we would commend the chapter on Malpractice and that on Malpractice Defense and Prophylaxis. As prophylaxis, Dr. Donaldson recommends a guarded tongue. Often malpractice suits are started through damning remarks of some fellow practitioner. Kindly feelings toward the other fellow rather than that of superiority will go a long way towards allaying that discontent among patients which so often produces needless trouble for all.

We have spoken of the author's style as being clear, concise and forceful. Each chapter could be expanded to greater length and probably would if the same chapter headings were dealt with by some writers we know. However, nothing would be gained in the way of clearness. A feature we would also commend favorably is the apt quotation at the head of each chapter. Donaldson has made law a live and interesting subject.

It is a work that should occupy an important place in the library of every roentgenologist, and the numerous physicians who assay to "do their own x-ray work" will surely want to know where they stand in relation to the law.

The book is recommended as a clear, concise authoritative statement of an important subject.

CLIO MEDICA: RUSSIAN MEDICINE. By W. Horsley Gantt, M.D., Johns Hopkins University School of Medicine; formerly Chief of Medical Division, American Relief Administration, Leningrad Unit (1922-23); Collaborator in Pavlov's Laboratories (1925-29). With 12 illustrations. Price, \$2.00. New York: Paul B. Hoeber, Inc.; Medical Book Department of Harper & Brothers, 1937.

CLIO MEDICA: PATHOLOGY. By E. B. Krumbhaar, M.D., Professor of Pathology, University of Pennsylvania School of Medicine. With 18 illustrations. Price, \$2.00. New York: Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, 1937.

We have had occasion to review a number of Clio Medica series of medical history monographs, and have always welcomed their arrival. The books are small, convenient for the coat pocket. They can be carried around and read at odd moments when one has time and has not access to a large library. The little volume on Russian Medicine is a mine of information on the history of medicine in Russia by one who has not merely visited Russia, but has worked with the American Relief Administration in Russia for a year and afterwards worked in Professor Pavlov's laboratory for five years from 1924 to 1929. The work also gives a thumb-nail sketch of Russian history; that is, enough Russian history to understand the medical setting. The author divides his subject of Russian medicine into five periods, namely, that of primitive medicine up to

the reign of Peter the Great; Peter the Great and the period of foreign influence; the period of independent Russian medicine; Famines and Epidemics, the Great War and the Revolution, and lastly, Soviet medicine.

Dr. Krumbhaar, editor of the entire series, contributed the volume on the history of pathology. Pathology has been recognized as one of the major, if not the major, chapter in the history of medicine. This little volume might be looked upon as a history of medicine from the viewpoint of the pathologist. The author begins with primitive, classical and medieval concepts of pathology. Then we have a chapter on the theories of the nature of disease, followed by one on the rise of anatomical concepts of disease. This is followed by a chapter on systematized gross pathological anatomy. Then is an interesting chapter on cellular pathology which, of course, would not be possible before the epoch-making discoveries of Schleiden and Schwann. This little book contains a mass of information, interestingly presented. A feature of the work that is of paramount interest is what the author terms "a chronological list of pathologic milestones," beginning at 2160 B.C. and carrying the subject forward to 1935 A.D. We cannot too strongly commend these little volumes on the subject of medical history.

INJURIES AND DISEASES OF THE HIP, SURGERY AND CONSERVATIVE TREATMENT. By Fred H. Albee, M.D., LL.D., F.A.C.S., Past President, American Orthopedic Association; Chairman, Rehabilitation Commission of the State of New Jersey; Assisted by Robert L. Preston, M.D., Associate in Orthopedic Surgery, Columbia University (New York Post-Graduate Medical School). With 100 illustrations, including three in color. Price \$5.50. New York: Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, 1937.

A work on Injuries and Diseases of the Hip is long overdue. The profession will, therefore, welcome the appearance of this work of a master. The author deals with fractures of the neck of the femur and also ununited fractures, the subject of dislocation. Tuberculosis of the hip joint always is an important subject and is treated at length in forty pages. Twenty-two pages are devoted to the subject of Coxa Vara. Then we have a chapter of ten pages on Osteoarthritis. The author goes into detail on the various methods of treatment of fractures, including the fracture of long standing, but ununited. The book is extremely well illustrated, not only with good radiographs, but with line drawings as well. It is a valuable work, not only to the orthopedic surgeon, but to everyone whose lot it is from time to time to handle hip fracture.

Harris—"When the house-wreckers tore down Brown's house they found a collar button he had lost twelve years ago."

Kramer—"I'd think it would have been cheaper for him to have bought another collar button."

Among Our Contributors

Dr. Alexander M. Campbell is a graduate of the Wayne University College of Medicine. He is Chairman of the Committee on Maternal Health, Michigan State Medical Society. Member of the American Gynecological Society, American Association of Obstetricians, Gynecologists, and Abdominal Surgeons, Chicago Gynecological Society and Detroit Obstetrical and Gynecological Society.

* * *

Dr. Warren B. Cooksey of Detroit was graduated A.B. from the University of Kansas in 1922, and M.D. from Harvard University in 1926. He is a Fellow of the American College of Physicians, Instructor in Medicine at the Wayne University College of Medicine, Medical Consultant of the Florence Crittenton Hospital, and Attending Physician in the Out-Patient Department at Harper Hospital, Detroit.

* * *

Dr. William A. Evans, Jr., is a graduate of Williams College, A.B., 1926, Johns Hopkins Medical School, M.D., 1930. He has held various positions on the resident staff of the Peter Bent Brigham Hospital, Boston, Massachusetts, and in the Department of Medicine in the Harvard Medical School, 1930-36. He is now engaged in the practice of roentgenology in Detroit.

* * *

Dr. Henry E. Perry graduated from Michigan College of Medicine and Surgery in 1897. He took a postgraduate course at the New York Post Graduate School in 1900, and graduated from Northwestern University Medical School in 1904. He served in the Spanish-American war during 1898. He was Assistant Medical Superintendent at Newberry State Hospital, 1901 and 1902. He was president of the Michigan State Medical Society, 1936 and 1937.

A LITTLE NONSENSE

Man—"So you asked Mary to marry you?"

Friend—"Yes, but I didn't have any luck. She asked me if I had any prospects."

Man—"Why didn't you tell her all about your rich uncle?"

Friend—"I did. Mary is my aunt now!"

Mrs. Professor—"William, you haven't kissed me for three whole days."

Professor (absently)—"You don't say! Whom have I been kissing?"

Friend—"What would you do if you were in my shoes?"

Man—"I'd shine them."



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COUNTY SOCIETIES

BRANCHES OF THE MICHIGAN STATE MEDICAL SOCIETY

COUNTY SOCIETY	PRESIDENT	SECRETARY	MEETINGS	
			Regular	Annual
Allegan	G. H. RIGTERINK Hamilton	M. B. BECKETT Allegan	1st Tuesday	1st Tuesday December
Alpena-Alcona- Presque Isle.....	DR. C. A. CARPENTER Onaway	HAROLD KESSLER Alpena	Last Thursday 6:00 p. m.	Last Thursday December
Barry	H. S. WEDEL Freeport	G. F. FISHER Hastings	2nd Thursday 8:00 p. m.	1st Thursday January
Bay-Arenac-Iosco- Gladwin	DR. A. D. ALLEN Bay City	A. L. ZILIAK Bay City	2nd and 4th Wednesday (ex- cept July, Aug., Sept.) 6:00 p. m.	2nd Wednesday December
Berrien	C. S. EMERY St. Joseph	A. F. BLIESMER St. Joseph	2nd Wednesday or Thursday	2nd Wednesday or Thursday, December
Branch	BERT W. CULVER Coldwater	F. S. LEEDER Coldwater	3rd Thursday 6:30 p. m.	3rd Thursday December
Calhoun	C. W. BRAINARD Battle Creek	WILFRID HAUGHEY Battle Creek	1st Tuesday (except July and Aug.)	1st Tuesday December
Cass	S. E. BRYANT Dowagiac	K. C. PIERCE Dowagiac	2nd Wednesday or Thursday	December 15
Chippewa- Mackinac	F. J. MOLONEY Sault Ste. Marie	GEO. A. CONRAD Sault Ste. Marie	1st Friday	1st Friday December
Clinton	A. C. HENTHORN St. Johns	T. Y. HO St. Johns	1st Tuesday 7:30 p. m.	1st Tuesday October
Delta	H. Q. GROOS Escanaba	G. W. BENSON Escanaba	1st Thursday 8:30 p. m.	December 2
Dickinson-Iron	D. R. SMITH Iron Mountain	W. H. HURON Iron Mountain	1st Thursday 6:30 p. m.	1st Thursday December
Eaton	H. A. MOYER Eaton Rapids	THOMAS WILENSKY Eaton Rapids	Last Thursday	No set date
Genesee	ALVIN N. THOMPSON Flint	C. W. COLWELL Flint	2nd and 4th Tuesday (except July and August)	2nd Tuesday November
Gogebic	C. C. URQUHART Ironwood	F. L. S. REYNOLDS Ironwood	3rd Tuesday	3rd Tuesday December
Grand Traverse- Leelanau-Benzie ..	DWIGHT GOODRICH Traverse City	E. F. SLADEK Traverse City	1st Tuesday 8:00 p. m.	1st Tuesday December
Gratiot-Isabella- Clare	KENNETH P. WOLFE Breckenridge	RICHARD L. WAGGONER St. Louis	3rd Thursday	3rd Thursday December
Hillsdale	LUTHER W. DAY Jonesville	E. G. MCGAVRAN Hillsdale	1st Tuesday	1st Tuesday January
Houghton-Baraga- Keweenaw	L. E. COFFIN Painesdale	C. A. COOPER Hancock	1st Tuesday	1st Tuesday January
Huron-Sanilac	F. O. KIRKER Sandusky	E. W. BLANCHARD Deckerville	2nd Thursday	2nd Thursday December
Ingham	MILTON SHAW Lansing	R. J. HIMMELBERGER Lansing	3rd Tuesday 6:30 p. m.	3rd Tuesday December
Ionia-Montcalm	L. E. KELSEY Lakeview	JOHN J. McCANN Ionia	2nd Tuesday 7:00 p. m.	2nd Tuesday December
Jackson	E. D. CROWLEY Jackson	H. W. PORTER Jackson	3rd Tuesday 6:30 p. m.	3rd Tuesday December
Kalamazoo- Van Buren	W. G. HOEBEKE Kalamazoo	L. W. GERSTNER Kalamazoo	3rd Tuesday 7:30 p. m.	3rd Tuesday December
Kent	A. B. SMITH Grand Rapids	J. M. WHALEN Grand Rapids	2nd and 4th Wednesday 8:15 p. m.	2nd Wednesday December
Lapeer	H. M. BEST Lapeer	CLARK DORLAND Lapeer	2nd Thursday	December or January
Lenawee	A. W. CHASE Adrian	ESLI T. MORDEN Adrian	3rd Tuesday	3rd Tuesday December
Livingston	H. L. SIGLER Howell	DUNCAN C. STEPHENS Howell	1st Friday 6:30 p. m.	1st Friday December
Luce	GEO. F. SWANSON Newberry	A. T. REHN Newberry	1st Tuesday 8:00 p. m.	1st Tuesday December
Macomb	JOSEPH N. SCHER Mt. Clemens	R. F. SALOT Mt. Clemens	1st Monday 12:00 noon	1st Monday December
Manistee	KATHRYN BRYAN Manistee	C. L. GRANT Manistee	Every Monday noon	3rd Thursday January
Marquette-Alger	E. R. ELZINGA Marquette	D. P. HORNBOKEN Marquette	No set date	December
Mason	W. S. MARTIN Ludington	CHAS. A. PAUKSTIS Ludington	No set time	No set time
Mecosta-Osceola ...	THOMAS P. TREYNOR Big Rapids	GLENN GRIEVE Big Rapids	2nd Tuesday	2nd Tuesday December

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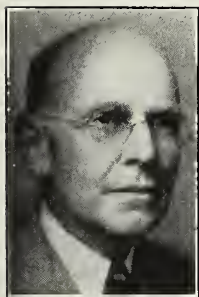
NOVEMBER, 1937

No. 11

THE DIABETIC PROBLEM AS INFLUENCED BY PROTAMINE INSULIN*

ELLIOTT P. JOSLIN, M.D.
BOSTON, MASSACHUSETTS

Protamine Insulin Has Increased the Use of Insulin



Protamine insulin has probably increased the number of diabetics using insulin in the United States by 70,000. This has come about not so much because of what doctors have said concerning it, but because diabetic patients generally recognize the value of insulin, and the simplicity of taking it only once a day has encouraged many to use it who avoided it heretofore. How many diabetic persons there are in the United States using insulin, how many there are who should use it, and how many there are remaining to make up the total number of diabetic individuals in the country, I have no idea, but the fact that during the

brief period of one or two years the number of insulin users has increased so much demonstrates that the problem of the management of diabetes in this country is changing rapidly. And there is good reason for this change.

Explanation of Rising Incidence of Diabetes

The incidence of diabetes in the United States is rising. First of all, because of the more systematic search for diabetics and the closer medical supervision of our people generally. Second, it is increasing because so many now are living into the period above 40 years in which the onset of diabetes is twice as frequent as it is in the interval between birth and 40 years. Third, diabetics live so much longer than hitherto. I know that the average duration of life of my own patients has more than doubled since 1914 and I believe that at present those individuals whose diabetes begins in 1937, on the average, will survive their diabetes for twenty

years, thus nearly doubling the duration again, and this opinion is reached without any thought of new discoveries in the realm of diabetes during the next two decades and such a possibility is unreasonable to contemplate. Whether there is a fourth factor, which is tending to increase diabetes, dependent upon changes in human occupations with resulting less muscular work, I am somewhat skeptical. It is true, the muscles are the largest mass of tissue in the body, but the skin is a close second, and Urbach's work upon the carbohydrate content of the skin is worth thought. A fifth factor might be changing habits of diet, but certainly today none of us really know what diet predisposes to diabetes and Himsworth's idea that the onset of the disease is preceded by a diet high in fat rests upon just about as good a physiological basis as the formerly accepted, although now discredited, idea, that the disease is more frequent in those regions where carbohydrate forms the bulk of the diet. Most of us feel that the total

*Read at the 72nd annual meeting of the Michigan State Medical Society, Grand Rapids, Sept. 29, 1937.

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quantity of food is far more important than the quality so far as the origin of diabetes is concerned. However, all recognize that a diet low in carbohydrate and high in fat is followed by hyperglycemia. Then, there is six, the influence of heredity. All too will acknowledge the importance of this factor in the general etiology of the disease, but whether it will be important in increasing the incidence in future generations, I am doubtful. If the influence of heredity was confined to those actually having the disease, one might say yes, because it is true that the number of children born with one parent known to be diabetic is increasing. Boucharlat never saw a pregnant diabetic woman and Naunyn, as late as 1906, records that he met with only one such case. In our own group, Priscilla White already has collected more than 300 instances. However, it takes two to make a diabetic and the number of children born in families with heredity recognized on both sides is certainly very small, and the number born with two parents actually diabetics is practically negligible. Furthermore, my experience with patients convinces me that they are very cautious about pregnancy and diligently inquire whether their offspring are liable to develop the disease. They are very slow to have children. For one child born today where the heredity is strong, I think that the number of possible births of children among those where the heredity is less marked is probably decreasing. Consequently, I am not worried about the question of heredity. Moreover, diabetics are not very fertile and even when pregnancy occurs, the outcome is successful in little over 60 per cent. I know that the relatives of those with the disease can pass it on and that it is conservative to state that approximately one-fourth of the population of our country have a diabetic relative, but I assure you that on the whole this group is conservative as to children.

Finally, I consider my diabetics are so much brighter anyway than other people that even if there were a few extra in the world, it would not be a cause of worry. I would have no hesitation whatsoever in matching them with certain groups of individuals who have disturbed our peace and security during this present year.

The sum of this whole matter of the incidence of diabetes is about this: that today there may be half a million diabetics in the

country and that the chances are that in 10 to 20 years from now the number will be a million. The number of individuals in the United States today who will develop diabetes before they die is about two and a half millions, but in my opinion this number will increase far less rapidly than the number of individuals actually with the disease, because it is influenced so much less by the etiological factors already discussed.

Diabetes in Massachusetts and Michigan

The population of Massachusetts was estimated to be 4,335,000 in 1934, and the number of diabetics has been estimated to be about 15,000. This figure is reached jointly by the State Board of Health based on their house to house canvas of sickness in different parts of the state, and also upon statistics from my own group of patients. The population of Michigan was estimated to be 5,093,000 in 1934. How many diabetics you have, I do not know. I understand the median age of the inhabitants of Massachusetts is 29.5 as compared with 27.2 years for Michigan but that does not greatly matter because people will live long and so this slight difference in median ages will count for little a few years hence. Thus, our problems are about the same.

Opportunities for Improvement in Treatment of Diabetes Are Very Great

Opportunity for improvement in the treatment of diabetes is possible and far more than is generally appreciated. Already, I have alluded to the increasing number of patients taking insulin, but this factor is really negligible compared with the advance in treatment which has followed a diffusion of knowledge of the disease itself among those who have it. It is a source of the greatest gratification to me to be able to demonstrate convincingly that the above statement is true and you, doctors, or rather those of you who have diabetes (and I suppose at the very least one in twenty-five of you has the disease) constitute my proof. Recently, you may have seen that the Metropolitan Life Insurance Company was kind enough to allow its Statistical Department, under the supervision of Dr. Louis I. Dublin and with the immediate assistance of Mr. Herbert H. Marks, to analyze the mortality rates for the diabetic doctors under my care, compared with that for my other patients with onset during similar periods. Be-

tween the ages of twenty-five and thirty-nine years, the mortality for all the patients was forty-five per 1,000, but for the doctors was only ten, and for the period between the ages of forty and fifty-nine years was forty-six per 1,000 for all the patients, but only eighteen for the doctors. Above this age, the difference in mortality was present but slight. In other words, if we could teach all our patients as much about their disease as a doctor knows, the younger ones of them would have less than one-fourth their present mortality and those in middle life, less than one-half the present mortality. You may say such a prospect is unlikely, but I assure you my patients realize the desirability of it and in their own ways I find act accordingly. Thus, I know all my intelligent diabetic girls, who do not marry a doctor, will pick out a bright, young doctor to teach them what he knows about diabetes. As far the boys, personal observation shows me that if they have not married a nurse, it is not because of lack of desire to do so on their part. Quite irrespective of these laudable endeavors, the logic of the situation is that the treatment of our diabetic patients can advance enormously provided we will only teach them how to live, and this is the basis upon which any campaign for the improvement of diabetic treatment in this country rests and the reason why it can be optimistic.

Medical versus Lay Organizations in Diabetic Campaigns

How shall a knowledge of diabetic treatment be imparted to the patient and spread throughout the community? I feel very strongly upon this matter and believe it should originate with the doctors themselves rather than with diabetic associations in the hands of the laity. The temptation is strong to form lay associations for the treatment of diabetes, because of the success of similar associations for tuberculosis. The two diseases, however, are absolutely different. Tuberculosis is relatively of short duration, communicable and originates with increasing degree as poverty is approached. Diabetes, on the other hand, lasts for life, is not contagious and its incidence has always been recognized to increase in those groups exposed to luxurious living. Thus, the question of financing a campaign for diabetics is entirely different from that of tuberculosis, for, although diabetes is found in the underprivileged, there are so many who have it

among the well-to-do that they are better able to care for others with it. Indeed, it is good business for a rich diabetic to take care of a poor diabetic or many poor diabetics, because the increased knowledge his own doctor will obtain by treating many diabetics will redound to his own advantage.

Diabetes is an individualistic disease. It requires prolonged and personal supervision by the same doctor. Far greater success is obtained by continuous treatment in a doctor's office than by treatment in a clinic where the care of the patient changes every few months. This is driven home to me constantly. Diabetes is a disease for the family doctor to treat for life. It is for him with his knowledge of home conditions not only to look out for the individual patient but the responsibility of the family doctor extends to the whole family and to all the relatives of the diabetic. Therefore, above all things, I favor any method which will enable the family doctor to treat diabetic patients well.

Providing Laboratory and Nursing Facilities for General Practitioners

Hospital doctors have privileges which are not available for family doctors. It is time that these same privileges were made accessible to physicians in their own offices. Thus, the cost of laboratory tests should be made as reasonable for physicians in their general practice as for physicians who are on hospital staffs. Furthermore, teaching diabetic nurses should be just as available for physicians who have patients to treat in their homes as for physicians in hospitals. Ambulatory patients could go to diabetic classes at a hospital, but in many instances it is better that instruction be carried out at the doctor's office, or in the patient's home, just as often in a hospital it is sometimes indicated at the bedside rather than in the diabetic class room.

To make these services of laboratory and teaching available involves little expense. A few hundred dollars would suffice to supplement existing facilities and bring them up to standard. Eventually, they should be self supporting. I do not mean that the initial grant should come wholly from wealthy people. We have found that of our diabetic children going to camp, and this present summer we had 216 in diabetic camps, that there was a willingness of some 50 per cent of these children to contribute in whole or in part the minimum rates for their diabetic

care. As for this matter of expenses, I can cite one or two concrete examples. Originally it cost us about \$1,500 annually to maintain our Podiatry Clinic, but no longer am I called upon to raise any funds whatsoever for this purpose. Similarly, when we started our Dental Diabetic Clinic, the expenses were fully as great, but today these are wholly cared for by the clinic itself and each patient, rich or poor, gets a free examination of the teeth. And how advantageous such a clinic is! This developed only this month, when a former patient, wandering into the hospital for the extraction of a tooth, was actually diagnosed by the dentist as a probable case of diabetic coma, admitted to the hospital and discharged, relieved, the next day. She did have diabetic coma, CO_2 , 14 volumes per cent. Prompt recognition saved my charity funds one hundred dollars.

It is true that our teaching of diabetics in the hospital costs a considerable sum. For one nurse, the expense is shared by the Nurses' Training School because more than a half of the nurse's time is devoted to education of the nurses. For a second nurse I must secure a complete salary and for our Wandering Diabetic Nurse who travels around New England this likewise still holds, because although she receives fees from patients these really cover no more than her expenses but do not amount to enough to offset the salary. I am rather sorry for this because in general a good thing is self-supporting.

Recently, by an oversight in my office, a patient went without a blood sugar test having been done. Of course, I told the patient to go to his local hospital, secure the test and I would pay for it and I later paid a \$5 bill for this single blood sugar test.

This patient came from the middle of the state, in a moderate-sized community where I doubt if the doctors receive more than \$2 or \$3 for a visit. A charge of \$5 for a blood sugar test means that diabetic patients in this community will not secure the advantages of blood sugar tests because the patients cannot afford to pay the doctor for a visit and approximately twice as much for a blood sugar. Headway in the treatment of diabetes only can come about when private family doctors can secure laboratory work at reasonable rates.

What is the cost of a blood sugar test? A technician can do between twenty and thirty

tests for sugar in the blood in one day. It requires but little more time to do five or ten tests than to set up arrangements for one test. Approximately one-half the cost of a blood sugar test in the hospital is expended on recording and reporting the results of the tests in the different wards about the hospital building. It surely costs the same for a technician to hunt up the patient in a hospital ward and take the blood for the test as it does actually to perform the test in the laboratory. Consequently, to reduce hospital expenses we ask the patients, whenever possible, to go to the laboratory. We arrange to have the blood sugar tests read in groups two or three times a day rather than every hour and plan in various ways to reduce the costs of reports. In my opinion, a hospital can make money charging between 50 and 75 cents for a blood sugar test and a reasonable charge to make for a blood sugar test when the blood is delivered to the laboratory by a family doctor is \$1.00. So long as a community tolerates a \$5 charge for a laboratory test, in my opinion, patients in that community will be treated about one-fifth as well as they could be treated. Already, I have alluded to the fact that doctors show a diabetic mortality of less than one-quarter, and in middle life less than one-half, that of the ordinary patients. I suspect that if I analyzed the data of the wives of doctors and the children of doctors, and the parents of doctors, just as the analysis was made on the 300 diabetic doctors I care for, it would be found that they also showed a favorable mortality, and one of the contributing factors is that these individuals get free tests.

Increase the Output of Laboratory Tests and Diabetic Education and Lessen Costs

In Michigan, with efficiency carried to the highest degree in the world, arrangements certainly can be made by which the cost of laboratory tests can be reduced to a minimum. The whole point is to do these wholesale and, furthermore, so cheaply that many, many more tests will be performed than formerly and treatment of diabetes immeasurably improved. Furthermore, it is perfectly obvious that so soon as costs drop the number of tests will go up.

Whether the above suggestions for improvement in the treatment of diabetes in Massachusetts are applicable at all to Michigan, I do not pretend to know, but I do

urge upon physicians in Michigan, just as I do upon Massachusetts physicians, to take the initiative in some such arrangement rather than to expend their energies forming lay-diabetic organizations to bring this about. Diabetic patients want to live just as long as diabetic doctors and if the diabetic doctors don't give them a chance, then they will make a chance for themselves. Today, diabetes is a disease for the family doctor and it will be a disease for the family doctor in years to come even more and more. It is for him to show that he appreciates this fact, and, furthermore, to convince his diabetic patients that he realizes it by providing the means for their better care throughout their entire life.

The Wandering Diabetic Nurse

May I expand upon the topic of the wandering diabetic nurse. Wandering diabetic nurses can give instruction to patients with very light expense in their own home. Thus, one diabetic nurse can surely make 600 visits a year coming in contact with 200 patients. In many instances, more than one patient can be taught at a time in a doctor's office or in a patient's home. I feel quite strongly that this means fifteen diabetic nurses scattered throughout Massachusetts in diabetic units and made available to doctors in their community could influence the treatment of diabetes very materially and would uphold it as much as we should attempt to do during the next few years.

The problem of diabetic treatment is changing so rapidly that no plan should be laid out for more than a temporary period. Furthermore, it should not be hard and fast because experiments of methods should be undertaken very freely.

In Massachusetts I would like to see these fifteen Wandering Diabetic Nurses in fifteen diabetic units or islands of safety scattered throughout the state. This would be a simple undertaking. First of all, it might necessitate a slight re-organization of laboratories. Each of these units would be in a position not only to do a greater volume of work but of a higher character and at less expense. The laboratory should be available for emergencies Sundays, nights and holidays, as well as on week-days. For adequate treatment of diabetic coma it is absolutely essential that laboratory facilities are available and securable within the space of minutes rather than hours. No practic-

ing physician would wish to send his patient to a hospital for treatment by another doctor or to carry out his own treatment unless he could command such immediate technical assistance.

Just as laboratory facilities in strategic points throughout Massachusetts should be available to practicing physicians, so too, teaching facilities for patients and skilled diabetic nurses should be at hand. The number of diabetics is not large in any one of these strategic points and, consequently, one nurse who has received detailed treatment in the management of diabetes and has had a wide experience in seeing diabetics for a few months of training at one hospital or another, would be a great help; not only could she teach all the other nurses about diabetes in the regular teaching course, but she would be at hand for help in the immediate care of diabetic cases in the hospitals during emergencies such as coma, hypoglycemia and gangrene, but likewise her time would allow her as a rule to respond to calls by a physician in the immediate vicinity of the hospital. Such a nurse would give instruction in doctor's offices, and in the patient's homes. Perhaps she could organize a weekly teaching hour, available for diabetics and their relatives at the hospital, irrespective as to whether the patients were hospital patients or sent there by private physicians for this purpose.

The expense of providing better laboratory facilities and of making available better instructions for diabetic patients, is comparatively slight. I would not ask for more than \$6,000 this next year to bring it about in 15 centres in Massachusetts. I firmly believe that for every dollar given for such a purpose the local communities and the hospitals would surely match it with profit to themselves with another dollar.

Protamine Insulin

Protamine insulin acts for twenty-four hours and more. Recently my associate, Dr. Mable, found that even at the end of forty-eight hours protamine insulin interfered with certain tests he was carrying out. Naturally if its action persists for so long a period, confusion will result if multiple doses are given during the day and practically all agree that protamine insulin should not be administered oftener than once in twenty-four hours.

If the action of protamine insulin is

spread out over twenty-four or forty-eight hours the actual effect of a single dose of twenty-four units must be slight in a single hour. Protamine insulin acts slowly whereas with regular insulin one obtains a reaction peak within an hour and a gradual disappearance of effect in six to eight hours. With protamine insulin the peak of effect certainly does not begin for several hours, perhaps three or four after it is injected, and even then slowly wears away until two days have elapsed. Regular insulin administered half an hour before a meal will take care of the carbohydrate of that meal, but protamine insulin will do no such thing. Protamine insulin will lower the blood sugar slowly and steadily for a prolonged period, but if the peak of the blood sugar is raised much after a meal it cannot wholly be reduced by the slowly acting protamine insulin.

On the other hand, protamine insulin when injected in the body acts steadily and all the time, and though it lowers the blood sugar slowly it keeps on doing so between meals and if too long an interval between meals occurs then it will lower the blood sugar so much as to reach a hypoglycemic level. If protamine insulin is administered before breakfast it does not have time to do this during the forenoon but it may do so in the late afternoon, several hours after the evening meal, or during the night, waking the patient with symptoms of a reaction.

Country doctors in Massachusetts do good work. Often they send us diabetic comas early and over and over again consult us by telephone before reaching decisions as to emergency treatment. Let me tell you of an example. One of the most influential citizens of a community 15 miles from Boston, 80 years old, was found unconscious in his bath room. I had not seen him since June when he was in good condition, taking 24 units of protamine insulin. We were asked to see him in consultation but as he was in excellent condition the night before Dr. Root advised the doctor to give him adrenalin, intravenous glucose and then send him in by ambulance in case he did not recover. The doctor was so young and so alert that he followed these rules exactly and within one-half an hour after the adrenalin and 25 c.c. of 50 per cent glucose the patient was all right. The reason why this reliable individual had the reaction was that during the summer he had improved and felt perfectly well and probably could

have reduced his insulin. Second, he went out to dinner the night before and was so meticulous that he ate distinctly less carbohydrate, although he did take a spoonful of baked beans and a good deal of cole slaw. Probably he did not digest these very well. At any rate the following morning his bowels moved freely, he took his insulin, a cold bath, his daily dozen of exercise and shaved and then had his reaction. Obviously, in the first place, he needed a little less insulin. In the second place he should take, on awakening, 5 or 10 grams of carbohydrate before getting out of bed and, in the third place, he should not take his protamine insulin at so long a period before breakfast.

Years ago the better utilization of carbohydrate was demonstrated both experimentally with animals and clinically with patients provided it was administered in small quantities at very frequent intervals. The same result follows the gradual administration of insulin. The more frequently insulin is given, the less is required to produce the same result, because of adjustments to temporary requirements. Holm showed this beautifully with depancreatized dogs. With a constant intravenous injection of insulin Bertram calculates from Holm's experiments that a normal adult, weight 60 kilograms, requires 7.8 units per day when fasting and 48 units when living upon a diet the caloric value of which is derived exclusively from carbohydrate. Thus, we have a good reason with our use of protamine insulin, which acts for twenty-four and even forty-eight hours, to increase the number of meals. Fortunately, the diabetic patient does not need to eat all the time, but except with the mild group of cases taking protamine insulin, it is wise that the breakfast be given early, the evening meal late and that in the forenoon, afternoon, and upon retiring a small carbohydrate lunch be administered. Sometimes this carbohydrate lunch will not serve the purpose to prevent a reaction and this occurs when it is given upon retiring, is quickly absorbed and an interval of ten hours, more or less, intervenes before breakfast. Under these circumstances one can combine with the carbohydrate a little protein or even fat, and instead of giving orange juice, 100 grams, or milk, 100 or more grams, one might give a Uneda biscuit with cheese or even 30 grams of nuts with the

thought that the carbohydrate derived from these less quickly absorbable carbohydrate foods or from protein would become available some hours after administration.

Protamine insulin acts wonderfully well. I know that, because I must have nearly 2,000 patients taking it. It is true that occasionally it does not appear to work, but as a rule one can find a reason therefor, just as usually in diabetes when anything goes awry if one seeks diligently for a cause one can find it. One of the commonest errors is to expect results from protamine insulin within the first few days of administration. We have gradually learned that we cannot expect a patient to become regulated with his diet and protamine insulin unless he is under observation for a week. None of you would wish to get a patient, freshly diagnosed, sugar-free in a day or two, if he comes to you without ever having been treated for diabetes. Such a patient has twenty years or more ahead of him and one needs not hurry. It is safer to proceed slowly. So too with protamine insulin one must allow time for it to act and actually more time is demanded to change a patient who has been living on regular insulin to protamine insulin than is necessary to start a fresh patient on protamine insulin. If one gets hasty and pushes up the dose of protamine insulin rapidly, a day or two later a reaction may occur. And if you decide to supplement protamine insulin by a few small doses of regular insulin several times later in the day, there is a good chance that in one or two mornings the patient will wake up with a reaction because the blood sugar will have dropped too much during the night. Give protamine insulin time to act. It is a dray horse and not a race horse.

Two-Period Tests for Glycemia

A patient, particularly one who has been accustomed to the use of regular insulin, wakes up in the mornings and finds his urine shows an orange or a yellow test and he thinks his dose of protamine insulin has been too small and promptly raises it and what happens? It is quite possible that even before he has time to take his breakfast he will develop a reaction, because the yellow or orange test with Benedict's solution represented sugar secreted hours earlier during the night. If he had only taken the precaution to have secured a second specimen of

urine one-half hour after the night urine had thoroughly been evacuated he might have found it sugar-free and the need for an increased dose of insulin would have vanished.

Two-period tests are extremely useful in treatment and particularly useful to the general practitioner who does not have a laboratory which can report within half an hour upon the sugar in the blood. Repeatedly instances occur in which patients enter the hospital with sugar in the urine and hypoglycemia. Only a few days ago a man was dumped from an ambulance, sent from another hospital to us, without a word relating to him in any way, shape or manner. He was unconscious and supposedly in coma. Fortunately, every one held their hands and secured the blood sugar test and found that although he had evidently been suffering from hypoglycemia, accentuated by a dose of 45 units of insulin shortly before he was sent to us, the blood sugar was at an extraordinarily low level, and his hypoglycemic status was obvious. And, in fact, after 100 grams of glucose the blood sugar did not even come up to normal, save temporarily, and whether the accompanying cerebral hemorrhage anticipated or resulted from the hypoglycemia, I doubt if any one can ever tell. When a patient, therefore, is unconscious and there is doubt as to whether it is coma or hypoglycemia, secure 2 specimens of urine at short intervals even if it is necessary to secure them with a catheter. Although I give this rule I will add that I suspect there is not one case in 20 of an insulin reaction which one cannot recognize as such and proceed immediately with treatment without even waiting for any specimen of urine. In the hospital, however, we make it a point to secure a blood sugar sample before giving glucose for an insulin reaction.

A two-period test should invariably be employed for patients after intravenous glucose. Of course, glycosuria will be present in the first specimen. Prescribe insulin only upon the result of the second test.

A frequent cause for upset in treatment of a patient taking protamine insulin is their omission of a little carbohydrate between meals and upon retiring. They cannot seem to realize that protamine insulin when put under the skin is put in the body and stays there and continues to act.

Exercise

Exercise is wonderful for a diabetic patient. You know that exercise will lower the blood sugar of a normal patient and will lower it to an extreme degree, provided the exercise is extreme. This is familiar to any football trainer and he provides for giving carbohydrate during the intermission of the game. So too, with a diabetic individual, he must take carbohydrate during intervals. Exercise will likewise lower the carbohydrate of a mild diabetic just as is the case in a healthy individual but the older doctors here will confirm me in the clinical statement that before insulin was discovered severe exercise would precipitate a diabetic coma. Today we understand that exercise makes a severe diabetic worse, but if we only give insulin to that severe diabetic before his exercise then he reacts to exercise just as a mild diabetic or a normal individual. Often diabetic patients taking protamine insulin forget this. They do not realize that with the protamine insulin in their bodies they are changed over almost to normal individuals and that they are utilizing their carbohydrate so very thoroughly and so very rapidly as the result of exercise, that as a consequence, if the exercise is unusual and they have not provided for it, they will develop hypoglycemia and a characteristic insulin reaction. Patients brought up on regular insulin would allow for the extra exercise they planned to take in the forenoon or afternoon by lowering their morning or noon dose of regular insulin, but that method is useless for a patient with protamine insulin, because the protamine insulin acts for a prolonged period and reducing a dose of protamine insulin in the morning may not show an effect until the next day. What the patient with protamine insulin must do if he is to undergo unusual exercise is to take extra carbohydrate, just as does the football player. Protamine insulin has transformed him so much more nearly into a normal individual than did the regular insulin that he must recognize that fact and adjust for it as would a normal individual.

This transfer of the diabetic individual to almost a normal status as the result of protamine insulin is accompanied by a lower average level of the blood sugar, and it is conceivable that a diabetic should not be returned 100 per cent to a normal status. Already I have alluded to the desirability of the gradual inauguration of diabetic treat-

ment for the freshly diagnosed patient. I think this holds still more for the diabetic patient of long duration who has been treated by diet or insulin for a decade or more but only partially controlled. Change this patient who has lived for some years with an elevated blood sugar over to a normal plane of blood sugar to which he has not been accustomed, and it is quite possible that he may not react favorably to it. This thought has come up in connection with perhaps 10 of my trusted and tried patients whom I have transferred to protamine insulin. They have felt a little let-down. I know their diabetes is now well controlled but perhaps they are living on a level of blood sugar so different from that to which they have been accustomed during the last 5 or 10 years that they are not adjusted to it, and perhaps either they should not be brought down to this status or it should have been accomplished during an interval of years instead of weeks or months.

If your patient with protamine insulin is not controlled with 10 units before breakfast, one can raise it to 20, in a few days to 30, and still later to 40, and if we could only have protamine insulin of U-80 strength one would not hesitate still more frequently to go up to 60 or 70 units before breakfast. The urine can be saved during this trial period in 4 portions, morning, afternoon, evening and night, and according to the tests, carbohydrate shifted from one meal to another so that it will be better utilized. It does not pay to change the dosage rapidly, and certainly after reaching a reasonable dose of protamine insulin, one should adhere to the same for several days, three, four, or even a week. By the end of that time one can have the patient submit a schedule of urine tests and run down in the morning column, the afternoon column, the evening column and the night column and pick out the red tests. Where they are most frequent, adjust the carbohydrate to get rid of them. Next one can adjust for the orange test, the yellow test and finally the green test, so that eventually one can match the urine against the diet and the protamine insulin. One of my patients who had difficulty with protamine insulin when she tried to regulate the dosage by frequent urine and blood tests, finally clarified her condition in the following way. It was perfectly evident to me from studies over a six-week interval that the dosage of insulin on seven of her

bad days was practically the same as upon seven of her good days. Therefore, it was obvious that something else entered into the picture than the insulin. I told her to keep on with her insulin in the standard dose, which seemed to work well and then to be governed by her symptoms and adjust her carbohydrate throughout the day according to those. Her doctor recently wrote me that this plan was working and that she had done far better and was getting on very well by this method and hence I recommend it to you.

Protamine Insulin Supplemented by Regular Insulin

Protamine insulin must be supplemented by regular insulin in many instances; with 80 per cent of our younger patients this is the rule and it applies to some of the older patients with diabetes of long standing. This whole subject has been recently discussed by me in the *Journal of the American Medical Association** and to that article which is available to you all I would refer. If 30 units of protamine insulin are necessary, about a third or 10 units of regular insulin may be required, but there are some patients who take nearly as much regular as protamine insulin simultaneously before breakfast and they work this out largely for themselves. If regular insulin is used with protamine insulin before breakfast, patients must be doubly warned about the danger of a reaction. They must be taught to have their breakfast soon after the regular insulin, because when under the influence of protamine insulin their blood sugar is fairly low on rising and the effect of an added dose of quickly acting regular insulin might take it to a hypoglycemia level very rapidly. Similarly, these patients are the ones who are most apt to have reactions in the late forenoon or afternoon and, therefore, the greatest pains must be used to instruct them to have carbohydrate in advance of the supposed reaction. I don't want my patients to have reactions.

In changing a patient from regular insulin to protamine insulin I warn you not to accede to any arrangement which does not give you supervision of that patient twice daily at least for a week. If the patient lives next door you may be willing to carry out a transfer without entrance to a hospital, but even then you are liable to get into trouble. You do yourself harm by attempting to put

a patient, whose expectations for treatment are high, on protamine insulin, when he has been doing fairly well with regular insulin. No one is more enthusiastic than I about the advantages of protamine insulin, but I am sure you will give me the credit for having been cautious in anything I have ever published about the ease of transfer of the well established patient. It is very easy for a doctor to lose his reputation if he tries to make such a transfer unless the patient understands the whole procedure at the start and is absolutely coöperative. Patients talk, and if one case does not appear to do well, it will ripple the water over the whole Back Bay, even though the Back Bay is filled in and has houses upon it. With any patient when you embark upon protamine insulin be sure they understand that the transfer to it may require for final success a period of a month or even more.

Reactions Undermine Confidence and Injure Reputations

Reactions are bad; they are not very dangerous so far as the possibility of immediate death is concerned but they have far-reaching effects. In the first place they impair the confidence of the patient in himself and in his doctor, and besides hurt his reputation with his employer. Consequently, reactions must be prevented. It is too bad that we must say so much about reactions to our patients, but it is only a square deal to tell them the truth about them and how to avoid them. Any diabetic must carry with him carbohydrate in some form so as to avoid a reaction. He must realize that if he has a reaction and unless he gets over it without difficulties the knowledge of that reaction injures the standing of all other diabetics in his community, and if a group of reactions happen to occur closely together, a community might take action regulating the daily lives of diabetics. Diabetics simply must not have reactions leading to unconsciousness. They must take precautions so that such reactions will never develop at a time which will involve public recognition with possible injury to themselves or particularly to others. Therefore, invariably before undertaking prolonged exercise or occupations which involve judgment and physical skill they should take carbohydrate in advance, especially if these occupations are carried on at two or more hours after a regular meal. I know plenty

**Jour. Am. Med. Assn.*, 109:497, 1937.

of diabetic boys who play football and practically never have a reaction, because they are bright enough and their trainers are bright enough to protect them. The same method must be used by all diabetics.

Reactions may work deleteriously upon the brain but as yet we don't know what happens. I am much interested in the new observations upon the electrical activity of the brain and am hoping that the work done in the neurological unit at the Boston City Hospital will give us an idea what changes go on when the blood sugar drops or when it has risen. With one of our patients I understand the changes in the tracings of the electrical currents in the brain were very marked when the blood sugar was artificially lowered and when it was raised. This work will bear close watching. It is very fortunate for diabetics and for us general practitioners, too, that the neurologists have taken up the treatment of schizophrenia with insulin. They will study reactions from new points of view and out of what they learn undoubtedly diabetics will profit. You will not find many doctors who have large numbers of diabetic patients, however, who want to treat schizophrenia with insulin. We see enough reactions as it is. Protect your patients, therefore, against reactions. At the Clara Barton Summer Camp, reactions have become less and less in number and in severity as we have learned how to treat the patient. We know that they are largely avoidable when patients can be under close observation. It is not so easy when they are running wild at home.

The Control of Diabetes

The control of diabetes is not perfect. If you have any doubt about that, read my article just mentioned in the *Journal of the American Medical Association*. Control, however, is far better than might appear, and even of my own patients I think rather better than the doctor would admit who wrote me a four-page letter the other day and said now he saw how much better his treatment of diabetes was than mine. One principle I learned from Dr. Maurice Richardson, that wonderful surgeon of Boston, years ago. He taught me to report unsuccessful results. I have adhered to this. I never have a patient die that I do not report that diabetic death. It does not matter where the patient dies, in North or South America or even farther away, I follow that

case up. In this way I have learned facts about my patients. It is true that many of my cases I see but once and many I do not see as often as once in five years but if I ever see a patient I follow that patient to death and you cannot tell how grateful I am for the help of the Metropolitan Life Insurance Company in analyzing the causes of death submitted to them by case numbers on our cards. In this way I have watched a decrease of deaths of diabetic coma from 61 per cent to 6 per cent. It is true that we have many cases of diabetic coma in the hospital at the George F. Baker Clinic, perhaps 60 a year, but a good share of these we have never seen before and yet they count as our cases. We are thankful to have them. On the other hand, we are thankful that only 6 per cent of all the patients seen, but once or more, no matter where they die, succumb to coma, and I cannot tell you how grateful I am that not one of my diabetic doctors has allowed himself to die of diabetic coma since 1925. Diabetic patients that I see are not all under good control, but this summer with our 216 diabetic children in camps we did have opportunities to notice the control of the children and those at the Clara Barton Camp, which is the most highly organized of them all and to which 5 groups of 30 children each went, represent a standard for the others. I beg every one of you, especially the younger you are, to tabulate your diabetic cases. Balance your books! Note the age at onset, note how long these patients live, and how many die of coma, and from each case, especially those doing badly, extract all that will help with the next patient.

And now let me say a few words about several topics in diabetes which to me are of importance. First of all, I will speak about the skin and pass over the influence of the thyroid, the adrenals, liver, the pancreas and muscles in diabetes, referring finally to the pituitary.

The Carbohydrate in the Skin

In Shields Warren's monograph on the Pathology of Diabetes you will find a picture showing the glycogen in the skin stained with carmine. It is striking in that it shows that the normal skin harbors much glycogen. In the diabetic skin alongside there are only points of carmine-stained-glycogen because the diabetic has little or no glycogen in the skin and the sugar is not demonstrable by a

stain. On the other hand, if you will give a diabetic insulin, then you can make his skin harbor so much glycogen that if the medical examiner endeavors to determine whether the body was a diabetic or a non-diabetic from the glycogen in the skin he could not tell the difference. Glycogen in the skin is an important factor in carbohydrate storage.

Skin makes up a good deal of the body and more than I ever thought. Actually it amounts to 16 per cent of the body weight. Next to the muscles it weighs more than any other tissue of the body and it weighs 3 times as much as the liver. For years I have taught my patients to take care of their skin because I know that the skin of the untreated diabetic is vulnerable.

What I wish now to call to your attention is the work of Urbach† in Vienna, who has been investigating the carbohydrate in the skin of patients. He has devised a method by which he can remove portions of the skin for examination for carbohydrate without cosmetic injury. Some time ago I sent for the apparatus and any day it may arrive, and we will carry out investigations here, but I thought you would just like to learn of some of his ideas. He recalls this fact: that dermatologists have noted that if non-diabetic patients with infection were placed upon a diabetic diet or given insulin that sometimes their lesions were affected favorably. He has studied the quantity of carbohydrate in the skin. As a rule, the skin sugar is six-tenths that of the blood sugar, but the bound carbohydrate in the skin, and by this he means the total carbohydrate obtained by hydrolizing portions of the skin, is 15 times that of the blood. He finds that upon occasions, patients will show high values for skin sugar when their blood sugar is normal. He hesitates to call this "skin diabetes" because no case has been observed with a high skin sugar who later has turned over into a diabetic. The sugar in the skin of normals or of diabetics reacts to insulin just as does the blood sugar, only less rapidly.

Urbach's work suggests even now that it pays for us to keep our diabetics' sugar well controlled and even if the urine may not contain sugar one might advantageously utilize insulin when the blood sugar is elevated in older and symptomless diabetics. I would hardly think of giving insulin unless the fasting blood sugar was 0.20 or 200 milli-

grams per cent but on account of Urbach's work I might give it more freely to such diabetics who have lesions such as infections which generally are thought to be influenced by the blood sugar.

There is another aspect of Urbach's work. I think his, just as Dr. Folin's method for examination of the blood, may open up new opportunities for treatment of disease which he never even thought of. Thus, Folin's method for determination of non-protein nitrogen has been of incalculable value in the estimation of the necessity for prostatic operations. Urbach's simple apparatus may possibly prove to be of far-reaching significance. At least I trust so. If it should prove what I would hope, it would reveal new stores of carbohydrate in the body and might have far-reaching effects upon conclusions relating to the formation of glycogen out of protein and fat and necessitate a real reopening of that complicated question.

The Pituitary Causation of Diabetes

Like Naunyn, I believe in the unity of diabetes and that around the pancreas the disease centers although it is influenced by the skin, the muscles, the liver and all the endocrine glands. And so, when I recently learned that true diabetes could be produced in dogs without direct interference with the pancreas, I thought you would be interested in it, too, and may I lead up to the actual story of this experimental procedure by a few historical considerations.

Obesity is the one outstanding precursor of diabetes. Only 1 per cent of my patients with onset of diabetes between fifty-one and sixty years was thin prior to the onset of the disease and I have had only one thin Jewish adult male diabetic patient and one Jewish adult female diabetic patient who was thin. But, in studying my diabetic patients it was noticeable that obesity was of little and of almost steadily diminishing importance in those below the age of forty years, and it was not until with Priscilla White and her studies upon our diabetic children that it developed that these younger patients, particularly the children with onset under fifteen years of age, were tall when their disease began. Tallness had been overlooked, because the height and weight of diabetic children at onset of the disease had not been recorded and, as you know in the old days prior to insulin following the onset of diabetes, children ceased to grow or grew very slowly. Dr. White demonstrated that

†Urbach, Defrisch and Sicher: *Klin. Woch.*, 16:452, 1937.

among our children for whom we had accurate measurements at onset they were on the average 2 inches and even more above standard height for their age. It was easy for me to point out years ago to a wondering group of young doctors at a hospital that the diabetic baby lying in the crib, if measured, would be above height. Conversely, dwarfism is common if diabetic children are neglected. Obesity in the old is not as a rule a precursor of diabetes in the young. A third factor is well known to you, namely, that in puberty there is an increase in the incidence of diabetes, that at the menopause there is an increase in the incidence of diabetes and that during catamenia the diabetes becomes more severe and even occasionally we see cases of coma at such times and that during pregnancy latent diabetes may come to the fore. Put these observations together—obesity, tallness, sex. Finally, you know I am always proud of my diabetics and although I cannot demonstrate the precociousness of their brains as clearly as of their bones, precocity is a feature of the diabetic child. These features—obesity, tallness, sexual relations and precocity, all suggest the pituitary gland.

Harvey Cushing found diabetes in 12 per cent of his acromegalic patients and glycosuria in some 25 per cent. Houssay, with his depancreatized toads, found that if he removed the pituitary gland, the diabetes persisted but was mild in character, and he furthermore proved that if he injected pituitary extract to these depancreatized and hypophysectomized toads, the diabetes became worse. Not only did Houssay do this with toads but he did it with dogs, too. Dr. Long, formerly of the Cox Metabolic Institute in Philadelphia but now Professor of Physiology at Yale, and Dr. Lukens have confirmed this work. They have also shown that this diabetic action of the pituitary extract is exerted upon the pancreas through the cortex of the adrenal glands. Various investigators have obtained temporary glycosuria following injections of pituitary extracts. Dr. Evans showed, in 1930, that if pituitary extract is injected into dogs glycosuria follows and after repeated in-

jections, albuminuria and glycosuria persisted even for some months. It was left, however, for Dr. F. G. Young, formerly associated with Dr. Best in Toronto, to demonstrate in the National Research laboratories at Hampstead, London, at the head of which is Sir Henry Dale, that an anterior pituitary extract injected daily for a considerable period of time (in one case, twenty-six days) would produce permanent diabetes in a dog.* Dog No. 28 lived with his diabetes for eight months after the cessation of injections. The diabetes was not so severe as the depancreatized animals Dr. Young used to see in Dr. Best's laboratory, but it was diabetes in every sense of the word. The diabetes did not require insulin but was amenable to insulin, yet when insulin was omitted in the case of dog No. 28, diabetic coma ensued and he died. That dog's pancreas weighed 52 grams and the dog only weighed 10 kilograms. The weight of a human pancreas is about 100 grams. As yet the examination of the pancreas has not been completed. Another dog developed diabetes, and this dog reported in the publication of the paper on August 14 in *The Lancet*, had shown his diabetes for two months following the cessation of the multiple injections of pituitary extract. A third dog developed transitory diabetes.

The results of this experiment of Dr. Young who has produced diabetes without removal of the pancreas cannot be foreseen. Obviously, they will be revolutionary. If one can produce diabetes by an extract of the anterior pituitary gland and diabetes can be made milder by the removal of the gland, is it not possible that something can be found which will control this pituitary hormone? If there is a diabetogenic pituitary hormone, why not a contra-diabetogenic hormone? As you know, various attempts have been made along these lines but as yet they have been fruitless. However, it pays, today, for a diabetic to keep alive, because the chances are that the treatment of his disease will be metamorphosed within the next few years.

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MIGRAINE: A DISORDER OF THE SYMPATHETIC NERVOUS SYSTEM

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Migraine is a functional disorder of the sympathetic nervous system, the outstanding symptoms of which are periodic attacks of severe headache frequently confined to one side of the head and attended with visual, sensory and other symptoms.

The most important and most active factor in causing migraine is heredity. The hereditary influence usually acts by direct transmission of the disorder from ancestors to the patient. In no other disease of the nervous system is the hereditary influence so directly handed down. If one inquires carefully into the family history of the patient suffering with migraine he will almost always find that the father or mother or some relative in the family has at some time suffered with migraine. The hereditary factor is more active if it appears in the immediate ancestors of the patient, that is, in the father or mother or both, but when not found in either father or mother or grandparents, it sometimes appears in collateral members of the family such as uncles or aunts or cousins. In some instances the hereditary influence is not directly transmitted as migraine but may be transformed in its passage from one member of the family to another, and so while in the ancestors or relatives there is a history of migraine, the patient may give evidence of hysteria, epilepsy or a psychoneurosis or psychosis. On the other hand hay fever, asthma, angioneurotic edema, Raynaud's disease and other disorders of the sympathetic nervous system may sometimes be found in the ancestors or relatives of the patient suffering with migraine. These disorders sometimes occur also in the patient suffering from migraine. A tendency to so-called rheumatic or gouty diathesis may also be found in the ancestors or in some relative of the patient. Heredity produces the fundamental disorder which is the essential condition in causing the disease.

The individual suffering with migraine has inherited a sympathetic nervous system which is unstable, irritable and easily thrown out of balance.

In addition to this as a fundamental and essential condition, there are quite a number of other things that may be regarded as exciting causes. Among these may be mentioned the following:

(1) The relation of age to attacks of migraine. The first attacks usually occur

at an early age. In at least one-third of the cases the disease first appears between the ages of five and ten years. In other cases it may begin at puberty or adolescence or in early adult life. It is stated on good authority that less than ten per cent of the cases begin after the age of twenty years. It occurs twice as often in females as males. In women who are subject to migraine the attack often occurs during the menstrual period and usually disappears during pregnancy. When fully developed, the disease usually continues for many years. In most women it disappears or greatly lessens in severity at the menopause, and the same is true in men at about the age of fifty-five or sixty years.

(2) Among the exciting causes may also be mentioned depressive emotions such as those associated with worry, anxiety, fear and anger, fatigue, exhaustion, loss of sleep, eye-strain, errors of refraction, excessive use of the eyes, using the eyes in a bright light. Infectious diseases such as influenza, tonsillitis, pneumonia and other acute infections may also act as exciting causes. An illness of any kind that reduces the general health is apt to act as an exciting cause. I have recently seen quite a number of cases follow an attack of heat prostration during the hot summer. A sudden extreme change in temperature may also act as an exciting cause in some cases.

(3) Sensitization to certain foods and certain toxins, a condition which is usually described under the head of anaphylaxis, has recently been emphasized as a very important factor in exciting attacks of migraine. Some years ago the writer tested a large group of patients suffering with migraine for anaphylactic reactions.

In some of these cases there seemed to be some relation between the sensitization of the patient to certain foods and the occurrence of migraine attacks, but in others, no such relation was found. More than this, it is a well known fact that many individuals who give an anaphylactic reaction to certain foods do not have migraine, and on the other hand many cases having migraine give no anaphylactic reaction to different foods. In the writer's opinion, whatever relation there may be between anaphylaxis and migraine must be that the food or chemical substances producing the anaphylaxis acts on the sympathetic nervous system as an irritant or stimulant and this results in a change in the circulation of the blood in the meninges and cortex of the brain and thus causes the headache.

(4) The idea has also been presented that the headache is caused by increased alkalinity of the blood, and to overcome this the so-called ketogenic diet has been recommended. This is a question that I think is not definitely settled as yet. There does seem to be some relation in certain cases between the alkalinity of the blood and the attacks of migraine, but in other cases no such relation can be demonstrated.

It may be difficult to determine just what effect any particular food or influence may have in developing or relieving the attack of migraine, because the headache is intermittent and in most cases lasts only a short time no matter what may be the cause or the remedy. Sometimes a remedy is given credit for relieving an attack when perhaps the headache would have disappeared in a short time had no remedy been used. In order to determine the efficiency of any particular remedy in the treatment of migraine it must cause a cessation of the headache over a relatively long time, that is over a period of time in which the patient usually has repeated attacks of headache. If the remedy relieves the headache during this period it would be evidence that the remedy was efficient.

(5) Finally, it should be emphasized that according to the best knowledge we have at the present time, the immediate cause of the severe headache and other associated symptoms is a spasm or contraction of the arteries in the meninges and cortical centers of the large brain. The immediate cause of the pain is due to the contraction and spasm of the meningeal

arteries which pinch the sensory nerves in the walls of the meningeal arteries. The spasm of the arteries supplying blood to the different cortical centers, thereby reducing or cutting off their blood supply, is undoubtedly responsible for many of the other symptoms associated with the headache, such as temporary blindness, homonymous hemianopsia, aphasia, temporary loss of sensation and temporary motor paralysis of certain parts of the body. The attacks of severe vertigo which frequently accompany an attack of headache are undoubtedly due to a spasm of the arteries and a change in the circulation in the labyrinth and vestibular apparatus and connecting nerve pathways of the internal ear.

Symptoms

The symptoms presented by a patient suffering with migraine may be considered under two heads: First, the symptoms of the attack; and second, the symptoms in the intervals between the attacks.

The symptoms during the attack are the most important and most distressing. These may be described and occur usually in the following order: The patient usually has a prodromal period in which he feels depressed, weak, cold and apathetic. The prodromal period is sometimes attended by a ravenous appetite, which is probably due to an excessive secretion of hydrochloric acid in the stomach. Following this prodromal period, which is relatively short, there are usually sensory symptoms including particularly a disturbance of vision, such as dark spots before the eyes, blind spots, so-called scotomata, frequent bright flashes of light, zig zag figures of light and blindness in certain areas, and also sometimes a temporary blindness or homonymous hemianopsia as was illustrated by cases which the writer recently saw, and also other disturbances of vision. Following these symptoms the headache usually appears, sometimes rather suddenly but more often gradually. It is usually located, in the beginning at least, in definite parts of the head such as the frontal, supra orbital, orbital, temporal or occipital region, and is very often confined to one side frequently beginning in the temporal region. The character of the headache is described by the patient as throbbing, beating, pulsating, tearing, piercing and exasperating. It continues for a few hours or for two or three days and may terminate by

nausea and vomiting. The nausea and vomiting are often followed by a period of sleep and after this recovery.

The above represents briefly the different stages through which the patient passes in an attack. In addition to the above, however, he is emotionally depressed, is easily disturbed by light and noises. He usually prefers to be alone in a dark quiet room, feels weak and chilly and usually suffers intensely with the headache, sometimes passes a large amount of urine or has looseness of the bowels. The attack is also often attended by severe vertigo which is evidently the result of a disturbed circulation in the labyrinth and vestibular apparatus of the internal ear. During the attack, the patient usually has a pale face sometimes alternating with flushing. Pupils are frequently dilated, the eyeballs frequently become prominent and the pulse may be rapid. The blood pressure often rises. I have seen the blood pressure rise fifty points. The extremities are usually cold and often the hands and feet sweat profusely. As above noted, the temporary attacks of blindness, homonymous hemianopsia, aphasia, sensory anesthesia and motor paralysis are undoubtedly due to a spasm and contraction of the arteries in different cortical centers which interfere with the function of these centers.

It is of interest also to note that sometimes the attack of headache may be entirely absent and in its place the patient may have an attack of epilepsy or of some mental disturbance.

In the interval between the attacks of headache the patients usually enjoy fair health, but as a rule they complain of feeling tired, lack endurance and are easily disturbed by any unpleasant nervous or emotional excitement. Their capacity for mental or physical work is usually reduced and they have a group of symptoms that are usually described under the head of vagotonia, such as increased gastric acidity, spastic colon, constipation with increased secretion of mucus, sometimes a slow pulse, low blood pressure, low blood sugar, low metabolism. All of these vagotonic symptoms are a fundamental condition in nearly all cases of migraine. All patients do not have all of these symptoms, but most cases have two or more and in some cases all of these symptoms are present. This condition may be changed or modified by some intercurrent disease coming in and changing the

original vagotonic picture. For instance, we sometimes see cases with arteriosclerosis and high blood pressure where formerly the blood pressure was low, or some other disease like anemia or pernicious anemia may change the fundamental vagotonic symptoms.

People who have migraine are apt to have other disturbances of the sympathetic nervous system. It is well known that about eight per cent of patients suffering with migraine also have attacks of idiopathic epilepsy. I have a patient under my care, now, who has a long history of migraine and who has attacks of idiopathic epilepsy and also attacks of Raynaud's disease. All of these are the result of a vasomotor spasm in different parts of the body due to an irritable sympathetic nervous system.

Pathology

The knowledge we have at the present time indicates that migraine is an expression of a disorder of the sympathetic nervous system. In order to understand this, it may be proper to refer briefly to some fundamental facts concerning the anatomy and physiology of the sympathetic nervous system.

In the present paper, the writer is using the term sympathetic nervous system in its broadest anatomical sense and not in the more restricted sense that some physiologists have applied the term recently, which has led to more or less confusion. The sympathetic nervous system as we are using it in its anatomical sense is an aggregation of ganglia, nerves and nerve plexuses by which the viscera, glands, heart and blood vessels and smooth muscles in other situations receive their innervation.

The ganglia of the sympathetic nervous system are arranged in three groups, namely—

1. The ganglia of the sympathetic trunk.
2. The collateral or prevertebral ganglia.
3. The terminal ganglia.

The sympathetic nervous system is connected with the brain and spinal cord by afferent and efferent nerve pathways. The cell bodies of the afferent nerves are located in the cerebrospinal ganglia and the nerve fibers extend from these nerve cells outward and pass through a sympathetic ganglia to their termination in a visceral membrane, gland or smooth muscle without making any nerve connection with the sympathetic gang-

lia. There is only one neuron in this visceral afferent pathway that connects the sympathetic nervous system with the brain or spinal cord. The efferent visceral pathway

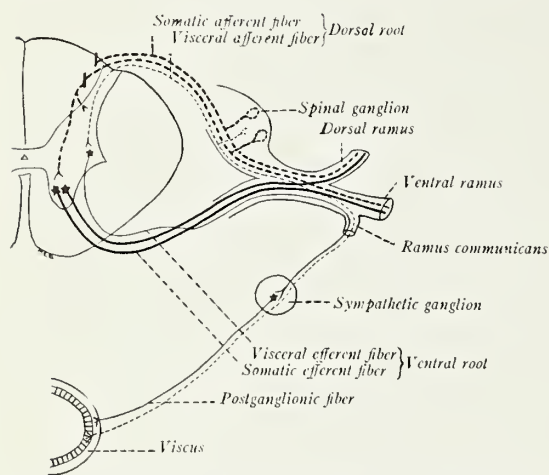


Fig. 1. Diagrammatic section through a spinal nerve and the spinal cord in the thoracic region to illustrate the chief functional types of peripheral nerve-fibres. (After Ranson).

is made up of two neurons. The cell body of one is located in the cerebrospinal axis and the other in a sympathetic ganglia.

The nerve fiber which passes from the cerebrospinal visceral nucleus is spoken of as the preganglionic nerve fiber, while the fiber passing from the sympathetic ganglia to a gland or muscle is the postganglionic fiber. This arrangement is illustrated in Figure 1 which shows the afferent and efferent visceral nerve pathways and their connection with the spinal cord.

There are three streams of preganglionic autonomic fibers that leave the cerebrospinal axis, namely—

1. The cranial stream which includes the general visceral efferent fibers of the oculomotor, facial, glossopharyngeal, vagus and accessory nerves. All of these end in the terminal ganglia, which are located close to or within the organ which they enervate (Fig. 2).

2. The thoracico-lumbar stream which includes fibers that arise from the cells of the intermediate lateral column of the spinal cord, make their exit through the thoracic and first four lumbar nerves, and after leaving the spinal nerves by way of the white rami they enter the sympathetic nervous system and terminate in the ganglia of the sympathetic trunk or in the collateral ganglia (Fig. 3).

3. The sacral stream which includes the visceral efferent fibers of the second, third and fourth sacral nerves. These arise from cells in the lateral column of the gray matter in the sacral portion of the spinal cord and run through the visceral branches of the second, third and fourth sacral nerves. These fibers end in the ganglia of the pelvic sympathetic plexus. Figure 2 is an illustration of the cranio-sacral stream of autonomic nerve fibers; the sacral stream make their connection with the ganglia of the pelvic sympathetic plexus. Figure 3 is an illustration of the thoracico-lumbar stream of the autonomic fibers which make their connection with the ganglia of the sympathetic trunk or the collateral ganglia, namely the celiac and associated collateral ganglia.

It is convenient to have a term which will express in the aggregate the sum total of all the general visceral efferent neurons, both preganglionic and postganglionic and include both those rising in the cranial and spinal nerves. For this purpose the term autonomic nervous system is now in general use and was first used in this way by the distinguished English physiologist, Dr. Langley. It should be emphasized that this is a functional division of the sympathetic nervous system and not an anatomical division and includes only the efferent elements. The cell body of the preganglionic neurons lie in the cerebrospinal nervous system.

The postganglionic neurons are located in the sympathetic nervous system. According to the origin of the preganglionic fibers in this division we may recognize the following three divisions of the autonomic system.

1. The cranial autonomic system whose preganglionic fibers make their exit by way of the third, seventh, ninth, tenth and eleventh cranial nerves.

2. The thoracico-lumbar autonomic system whose preganglionic fibers make their exit by way of the thoracic and upper lumbar spinal nerves.

3. The sacro-autonomic system whose preganglionic fibers run in the visceral branches of the second, third and fourth sacral nerves.

All of these visceral autonomic nerve pathways carry nerve impulses to the smooth muscles and glands of the body.

The cerebral and sacral systems are similar in that the preganglionic fiber terminates in a terminal ganglion and not in the ganglia of the sympathetic trunk. They also are

similar in that they respond in the same way to certain chemical substances and drugs. For instance, they are all stimulated by pilocarpine and are paralyzed by atropine

the sphincters of the digestive tract. They also stimulate the smooth muscles of the bronchi and respiratory tract. They lessen blood pressure and slow the circulation in

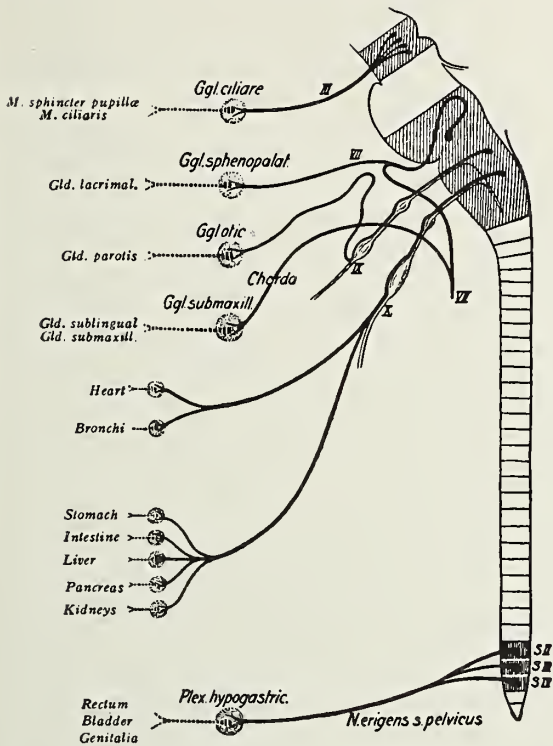


Fig. 2. The parasympathetic portion of the sympathetic nervous system. Preganglionic fibres are indicated by continuous lines; postganglionic fibres by dotted lines. (After Villiger).

and the atropine group, namely, belladonna, hyoscyamus and stramonium.

The thoracico-lumbar division of the autonomic nervous system is readily stimulated by the secretions of certain endocrine glands such as the adrenal-medulla, posterior lobe of the pituitary and thyroid. They are not paralyzed by any known drug or substance.

The cerebral and sacral autonomic nervous systems are similar in their physiological action upon the smooth muscles and glands of the body, and when active or stimulated, produce the following physiological action on the glands and smooth muscles; namely, they increase the activity of all of the mucous glands of the nose, mouth, throat, and the respiratory and digestive systems. They also increase the activity of all the glands of the gastrointestinal tract; namely, the glands of the stomach, intestines, liver, pancreas, spleen and kidneys. They also increase peristalsis and lessen the activity of

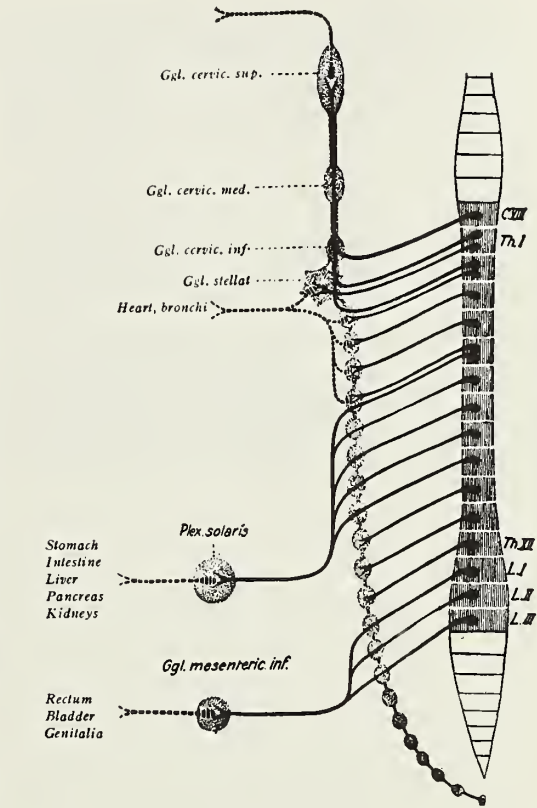


Fig. 3. Sympathetic nervous system. Gangliated cord with its ganglia. Origin of the true sympathetic in the spinal cord from the eighth cervical to the third lumbar segment. Preganglionic fibres are indicated by continuous lines; postganglionic fibres by dotted lines. The postganglionic fibres, which pass by way of the gray rami, to run in the peripheral spinal nerves are shown in the next diagram. (After Villiger).

the visceral blood vessels. They also slow the action of the heart.

The activity of the thoracico-lumbar division of the autonomic nervous system lessens the secretions of all glands in the respiratory and digestive tracts, lessens peristalsis and increases the activity of the sphincters of the digestive tract. This division also stimulates the action of the heart, increases the pulse rate, increases blood pressure, increases vasomotor contraction and increases the activity of the sweat glands and all smooth muscles of the skin.

Normally these two systems are balanced one against the other and when rightly balanced they act harmoniously in maintaining the proper function of the different organs of the body, but in some individuals one

side or the other of this autonomic nervous system may be in excess of the other. When the cranio-sacral, or greater vagus division, is in the ascendancy we have symptoms of so-called vagotonia, namely, increase in the activity of all the glands of the digestive system, including the stomach and intestines, and other glands connected with the gastro-intestinal tract and very often in these cases a spastic constipation and a so-called mucous colitis.

We also have as symptoms of vagotonia a slowing of the pulse, low blood pressure, low blood sugar, low metabolism, increase of uric acid content of the blood and a feeling of general fatigue and exhaustion on the part of the patient. These represent a group of symptoms that are quite characteristic of the individual who is suffering from migraine. He has these symptoms in the interval between the attacks of headache but during the attack of migraine the thoracico-lumbar division of the autonomic nervous system, or what may be termed the sympathetic division, is overactive and in the attack of headache he has symptoms of sympathicotonia. The nausea and vomiting, the increased blood pressure, pallor and such other symptoms due to a sympathicotonia which is the result of overactivity of the thoracico-lumbar or sympathetic division of the autonomic nervous system.

Sometimes the patient may also suffer from some intercurrent disease which may change this picture of vagotonia; that is, originally and fundamentally the migraine patient is usually vagotonic in the interval between the attacks of headache, but he may also suffer from some intercurrent disease, such as arteriosclerosis, pernicious anemia, or some other disease which will change the original vagotonic picture and instead of having low blood pressure and other symptoms of vagotonia he may have high blood pressure and some or all of the original symptoms of vagotonia may disappear.

Diagnosis

The diagnosis of migraine in a well developed case with symptoms of nausea and vomiting and other symptoms associated with the headache can usually be readily made. Incomplete and atypical cases and cases that may not be associated with nausea and vomiting are sometimes more difficult to diagnose. In the latter class the history will usually show atypical attacks of mi-

graine, and a history of migraine in ancestors or relatives will often aid in the diagnosis. In these atypical cases the headache is usually not so severe and is quite often limited to some particular part of the head such as one temporal or parietal region or the occipital region.

The examination of any case of migraine should include a careful history of the ancestors of the patient and a careful personal history, a complete general examination of all of the organs of the body, and an x-ray of the head, including the sella turcica, in both the anteroposterior and lateral positions. There should also be an examination of the eyes, including the fundus of the eyes, for the purpose of determining if there are any signs of increased intracranial pressure, and a careful examination of the nose, throat, sinuses, tonsils and teeth. A history and examination of this kind are usually sufficient to make a diagnosis in any particular case.

It is well to remember that all cases of headache are not migraine. There are many other causes for headache besides migraine. The general examination will also usually reveal the fact that the patient who is suffering from migraine is in most cases vagotonic in the interval between the attacks of headache and two or more and, sometimes, all of the following vagotonic symptoms will be found if the proper examination is made; namely, increased secretion of hydrochloric acid; spastic descending colon often associated with so-called mucous colitis; the x-ray often shows the stomach and intestinal tracts hypertonic with increased motility and sometimes a rapid emptying of the stomach or bowels and in other cases a spastic and contracted colon which is frequently the cause of constipation. Other vagotonic symptoms consist of slow pulse, low blood pressure, low blood sugar, low metabolism and usually a high uric acid content in the blood. The patient also tires easily and complains of feeling weak which is in these cases also a symptom of vagotonia.

Treatment

The treatment of migraine may be considered under two heads: First, the treatment of the attack of severe headache; and second, the care and treatment of the patient in the interval between the attacks. The most distressing symptom and that for which the patient seeks relief, of course, is

the severe headache. In order for the physician to deal with this condition successfully, it is quite important that he have a definite idea as to just what is the immediate cause of the severe headache. As we have already indicated above, the knowledge that we have, at present, quite clearly indicates that the immediate cause of the headache is a spasm of the arteries of the meninges of the brain, and this spasm of the arteries compresses and irritates the sensory nerves in the walls of the arteries, which is the immediate cause of the headache. With this idea in mind as the cause it is very evident that the treatment of the patient should be directed to relieving this arterial spasm. There are quite a number of different remedies and drugs that may be used to accomplish this. I have found the following treatment very effective in relieving attacks of severe headache in cases of migraine.

Have the patient take a warm enema at a temperature of 105 degrees and empty the bowels thoroughly, drink two or three glasses of quite warm water, and in addition to this take a warm full water bath at a temperature of 97 or 98 degrees F., remain in this bath for at least twenty minutes with a large cold compress around his head, and following this go to bed in a quiet, warm room for at least half a day. If this treatment is taken early in the attack it usually relieves the headache entirely or greatly lessens its severity. This warm treatment is given for the purpose of relaxing the vascular spasm of the meninges and cortical arteries of the cerebrum.

Figure 4 shows a sphygmographic tracing of a healthy individual—the first tracing before and the second tracing after taking a cool bath, and the third tracing after taking a warm water bath following the cool bath. These tracings were all made by the writer and illustrate in a very forceful way that the cold bath causes a contraction of the arteries as shown by the sphygmographic tracing, and the warm bath causes a relaxation of the arteries as shown by the last tracing in the figure. This simple remedy will often be found more effective in relieving the attack of migraine than the use of drugs. Sometimes, in severe cases it may be necessary to give the patient some drugs in addition to this treatment to give relief. The drugs that I have found most useful are such as cause a dilatation of the cerebral blood vessels. For this purpose, caffeine is

often very useful in relieving the severe headache of migraine. A cup of strong warm coffee taken early in the morning when an attack of migraine is starting will

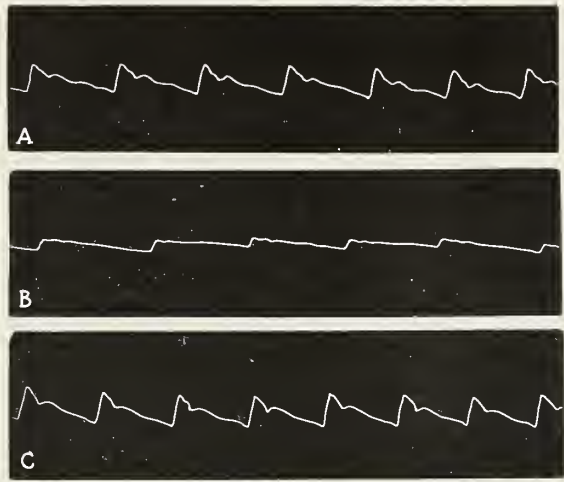


Fig. 4. Sphygmographic tracings to illustrate the effect of the short cold bath and warm bath in producing contraction and dilatation of the arteries. *A*, Tracing of the pulse before taking a spray at 60 degrees F. *B*, Tracing of the pulse taken after a spray at 60 degrees F. for one minute. *C*, Tracing of the pulse taken after a spray at 110 degrees F. for five minutes, which followed the tracing shown in *B*, and illustrates the effect of the warm spray bath on the pulse.

often give relief. A capsule containing one grain of caffeine and four grains of phenacetine is often effective. The inhalation of amylnitrite, which also dilates the blood vessels, often gives relief. There are also other drugs. The use of bromides during the attack and sometimes in the interval between the attacks often gives relief. In recent times, certain drugs have been recommended, such as Gynergen, one tablet two or three times a day, or Anacin tablets. In very severe cases where the headache is extreme it may be necessary to resort to codein or even a hypodermic of morphine, but all of these drugs should be avoided as much as possible as migraine is a chronic disorder.

In recent times surgical operations have been recommended and used in some extreme and severe cases of migraine. The surgical procedure that has been employed, recently, for the relief of headache is a ligation of the middle meningeal artery with a resection of a small portion of the vessel. An operation of this kind would be indicated only in very severe and extreme cases. Removal of one or more of the cervical sympathetic ganglia has also been recommended and used.

Care and Treatment of the Patient in the Interval Between Attacks

An individual who is subject to attacks of migraine should have proper medical attention and direction in the intervals between the attacks. It is very important that the patient understand that by careful and right living he may reduce the number of attacks of headache. Since eye strain and errors of refraction are often an exciting cause of the headache, the migraine patient should have an examination of his eyes and be properly fitted with glasses. The patient should also avoid the extreme use of the eyes and exposing them to extreme sunlight as this is sometimes sufficient to excite the attack of headache. Patients who suffer from migraine as a rule also have disturbances of the digestive tract. Most of them have an excess of hydrochloric acid in the stomach. The muscles of the stomach and bowels are often in a state of hypertonia with rapid emptying. In many cases there is a so-called spastic constipation, usually with a contraction of the descending colon and in some cases a condition of the bowels which is described as a mucous colitis. All of these disorders of the digestive tract are due to the vagotonic condition usually present in patients suffering from migraine. To relieve this condition of the digestive tract it is important that the patient's diet be carefully regulated. He should have food that is easily digested, laxative and non-irritating. He should avoid the use of coarse articles of food that might irritate the mucous membrane of the digestive tract. If the patient, in his experience, finds that he is apt to have a headache after eating certain articles of food, these articles should, of course, be avoided. In many cases it may be well for the patient to have an allergy test to determine whether he gives any anaphylactic reaction to certain articles of food. Foods of this kind, of course, should be avoided. The so-called ketogenic diet has been recommended and may be useful in certain cases. Intestinal toxemia which is sometimes present can be relieved by the regulation of diet and by the use of Lactose before meals, one or two teaspoonfuls of agar-agar well soaked in half a glass of warm water after meals, and a tablespoonful of paraffin oil in half a glass of water at bedtime and if necessary also on arising in the morning. Other remedies are

also recommended for overcoming intestinal toxemia.

The application of fomentations over the abdomen two or three times a day is very effective in relieving the spasm and irritation of the intestinal tract that is often present. A retaining oil enema consisting of a few ounces of paraffin oil injected into the bowels at bedtime and retained through the night may be helpful in overcoming the spasm and irritation of the colon. The use of atrophine is also recommended for relieving the spasm of the colon.

It is well for the physician to keep in mind that the patient usually has other vagotonic symptoms as indicated above, and these may need attention. The use of small doses of thyroid extract three times a day, given in the interval between the attacks of headache, is often helpful as the metabolism and blood sugar are often below normal.

Another very important instruction the physician has to give his migraine patients is that they must endeavor to live a careful and somewhat circumscribed life. It is important that they avoid overwork and fatigue, that they get their sleep regularly, and if possible lie down for an hour or so in the middle of the day. It is also very important that the patient avoid nervous and emotional strains as these are often responsible for the development of an attack of headache. The patient should understand that it is very important that he limit his activities and as far as possible avoid conditions that are apt to excite an attack of headache.

Note: The author expresses his thanks to the J. B. Lippincott Company of Philadelphia, for permission to use the illustrations from Villiger's work on "The Brain and Spinal Cord," also the W. B. Saunders Company of Philadelphia for permission to use the illustration from Ranson's "Anatomy of the Nervous System."

Bibliography

1. Adson, A. W.: Right fronto-temporal migraine relieved by surgical methods. *Proc. Staff Meet. Mayo Clin.*, 9:673, (Nov. 7) 1935.
2. Black, G. H. B.: Migraine. *Med. Jour. Australia*, (July 14) 1934.
3. Clark, S. L.: Innervation of the blood vessels of the medulla and spinal cord. *Jour. Comp. Neuro.*, 48: 247-265, 1929.
4. Craig, W. M.: Hemispheric migraine (cervicothoracic sympathetic ganglionectomy). *Proc. Staff Meet. Mayo Clin.*, 10:362, (June 5) 1935.
5. Critchley, M., and Ferguson, F. R.: Migraine. *Lancet*, (Jan. 21 and Jan. 28) 1933.
6. Dandy, W. E.: Treatment of hemispheric migraine by removal of the inferior cervical and first thoracic sympathetic ganglion. *Bull. Johns Hosp.*, 48:357, 1931.
7. Dickerson, D. G.: Surgical relief of headache of migraine. *Jour. Nerv. & Ment. Dis.*, 88:42, (Jan.) 1933.
8. Bassoe, Peter: Migraine. *Jour. A. M. A.*, 101:599, (Aug. 19) 1933.
9. Foldes, Eugene: A new aspect of migraine and cer-

- tain related conditions (retention of fluids). *Am. Jour. Dig. Dis. & Nut.*, 1:359, (Aug.) 1934.
9. Forbes, H. S., and Wolff, H. G.: Cerebral circulation; vasomotor control of cerebral vessels. *Arch. Neurol. and Psych.*, 19:1057-1086, 1928.
 10. Pagniez, P.: *Apropos de la migraine* (review of various theories). 41:1666, (Oct. 28) 1933.
 11. Paskind, H. A.: Relation of migraine, epilepsy and some other neuropsychiatric disorders. *Arch. Neurol. & Psychiat.*, 32:45, (July) 1934.
 12. Pool, J. L., and Nason, G. I.: Cerebral circulation, 35. The comparative effect of ergotamine tartrate on the arteries in the pia dura and skin of cats. *Arch. Neurol. and Psychiat.*, 33:276, (Feb.) 1935.
 13. Pool, J. L., von Storch, T. J. C., and Lennox, W. G.: Effect of ergotamine tartrate on pressure of cerebrospinal fluid and blood during migraine headache. *Arch. Int. Med.*, 57:32, (Jan.) 1936.
 14. Solomon, P.: Sympathetic nervous system in migraine; negative effect of ergotamine tartrate on electrical resistance of skin during relief of migraine headache. *Arch. Neurol. & Psychiat.*, 35:964, (May) 1936.
 15. Vallery-Radot, Pasteur, and Hamburger, J.: Question of sympathetic origin of attacks of migraine; discussion of relation of cerebral arterial spasm. *Presse Medicale*, 42:1681, (Oct. 27) 1934. (La crise migraineuse est-elle d'origine sympathique?)

TOXIC HEPATITIS*

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It seems that the best method of approach to the subject of toxic hepatitis in man is by way of a careful consideration of the end- result of toxic hepatitis, namely, toxic cirrhosis. If one is thoroughly conversant with the pathology of toxic cirrhosis one can more easily understand and better appreciate the changes in physiology of the liver found in toxic hepatitis. The symptoms, the physical findings, the changes in the constituents of the blood, both chemical and cellular, at the time of the poisoning and at a later period (if the patient survives) are for the most part easily explained on the basis of necrosis of the liver cells and regeneration of the liver tissues.

We will, therefore, begin our discussion with a review of toxic cirrhosis.

Toxic Cirrhosis

Toxic cirrhosis is that condition which develops in the liver following acute or chronic necrosis of the liver cells. It is characterized, usually, by great reduction in size and weight of the liver; by red or yellow color and by a firm nodular exterior. The cut section frequently shows red islands of liver tissue of varying size, which bleed freely, separated from each other by bands of fibrous tissue containing many bile ducts. Marchand, in 1895, called the condition "multiple nodular hyperplasia" and postulated its connection with acute yellow atrophy. Toxic cirrhosis is considered by most pathologists to be one of the portal cirrhoses.

Considerable controversy exists over the matter of toxic cirrhosis. Whether one accepts the broad concept of the disorder as put forward by Mallory⁹ in 1911 in which he classifies all forms of disease of the liver under the head of toxic cirrhosis or sclerosis, or whether one restricts the subject to "healed yellow atrophy," as done by Boyd² in 1935, is a matter of personal choice.

It is not my purpose to enter into a

lengthy discussion of the classification of toxic cirrhosis. I have been searching for months for one which would meet all requirements of a good workable etiological and pathological classification and have failed to find it. Mallory's with its twelve subdivisions seems too extensive. Boyd's seems too brief. Judd and Beaver,⁵ in 1932, reviewed twenty-two cases of acute and subacute yellow atrophy and considered the evolution of toxic cirrhosis but they make the note that in attempting to correlate their pathological classification with clinical features of the disease "only partial success was met with." Rich¹⁴ has offered a classification of jaundice based upon the vanden Bergh reaction. Since bile formation and excretion is only one of nine or more functions of the liver, this would seem to be inadequate ground upon which to base a classification. The subject of toxic liver disease is undergoing a great deal of investigation and ideas on the matter are changing. Osler observed only three cases of acute yellow atrophy among 28,000 medical cases admitted to Johns Hopkins Hospital in a period of twenty-three years. Nowadays, according to Boyd,² a microscopic diagnosis of acute necrosis of the liver can be made in a considerable number of cases.

It is a well known fact that certain poisonous substances, upon entrance to the human body, attack the liver parenchyma causing

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necrosis of the liver cell. This is acute necrosis of the liver or acute yellow atrophy. If the amount of the poison is less than sufficient to cause immediate death or if the resistance of the cells is high some of the liver cells survive. There begins at once a regeneration of liver cells from the existing normal liver cells (not from the bile canaliculi as was formerly thought—Boyd²). New bile channels form and establish contact with the new liver cells and begin to remove the accumulated excretion. During these few days jaundice may be extreme.

Unfortunately, there is, as a result of inflammatory reaction, a greater or lesser amount of proliferation of connective tissue and we may find at a later date, islands of functioning liver cells separated by dense bands of fibrous tissue. This is true toxic cirrhosis. The islands of functioning liver cells may do their work so well that all tests of liver function may be normal. Contraction of the scar tissue may produce a condition similar to or identical with portal cirrhosis. In the presence of such pathology in the liver an acute infection in some other part of the body, of minor importance in itself, may precipitate an acute hepatic insufficiency.

The poisonous substances which cause the damage to the liver cells make their way to the liver by way of—

1. The portal circulation (portal vein).
2. The systemic circulation (hepatic artery).
3. The biliary channels (?).

These noxious materials may be:

1. Inorganic or organic chemicals which have been ingested, inhaled or injected: phosphorus, arsphenamine, chloroform, cinchophen, mercury, carbon tetrachloride, phenylhydrazine, et cetera.
2. Toxins elaborated by pathogenic organisms present in the body, such as: *B. diphtheriæ*, *B. typhosus* and *paratyphosus*.
3. Substances of undetermined character and origin such as are met with in eclampsia and thyrotoxicosis.
4. X-ray irradiation, which, according to Bolliger and Inglis may cause necrosis of the liver with subsequent toxic cirrhosis.

In this industrial age with its free use of chemicals and close contact with dust and fumes, there is small wonder that the inci-

dence of toxic liver disease should be definitely increased. Mallory⁹ reports 8.2 per cent of 8,275 cases of cirrhosis found at autopsy to be true toxic cirrhosis. Furthermore, experimental work on the liver by Mann, Ivy, Carlson and Moon has opened new vistas of theory and wide avenues for investigation. However, in spite of our increasing knowledge of poisons and of the brilliant and clear results of experimentation we have not advanced very far in the knowledge of the early symptoms and laboratory findings of toxic liver disease. We will discuss symptoms in conjunction with the various degrees and stages of pathology.

In passing through the evolution of toxic cirrhosis we must first consider the necrosis of the parenchyma of the liver by the poisonous substances. The necrosis occurs in the center, in the periphery or in the mid-zonal region according to the type of poison at work. Chloroform characteristically attacks the cells about the central vein; eclampsia produces lesions of the periphery of the lobule; mid-zonal lesions are found in infectious diseases (according to Opie); and focal necrosis—scattered areas of destruction of cells—is seen in diphtheria and pneumonia and in septicemias.

We might, at this point digress for a moment to consider the work of McIndoe and Counseller⁸ on the bilaterality of the liver. These investigators have shown that in dogs the right and left branches of the portal vein remain entirely separate. The regional distribution is followed out by the hepatic artery and the bile duct. The division point is a line drawn from the fossa of the gallbladder to the juncture of the hepatic veins and the inferior vena cava. Although this bilaterality has been proven by injection of celloidin and dye (Copher and Dick³), pathological evidence, according to Boyd, does not bear it out. If the theory proves to be correct, it would explain the normal liver function tests that are found in some cases of severe toxic liver disease on the ground that the unaffected portion of the liver carries on the work of the whole liver.

Acute Toxic Hepatitis

Although the condition is comparatively rare, we are all familiar with the picture of acute toxic hepatitis, of acute hepatic toxemia, of acute necrosis of the liver, of acute yellow atrophy. The sudden onset with nausea and vomiting and with deepen-

ing jaundice is characteristic. There is, usually at first, an increase in liver dullness, followed by rapid diminution. A gradually deepening sleep-like coma develops and there may be convulsions. A hemorrhagic rash is frequently seen. The blood sugar is low, as is the blood urea. The nitrogen of the blood is increased and leucin and tyrosin appear in the urine. The blood cholesterol is usually increased and the cholesterol esters are diminished or absent. Galactose tolerance is decreased.

Chronic Toxic Hepatitis

We are less familiar, perhaps, with the picture of chronic toxic hepatitis, of sub-acute yellow atrophy, of chronic hepatocellular disease. The chronic form has been nicely described by Lyon:⁶ (1) undue fatigability, a sense of torpor or lethargy; (2) diurnal drowsiness, particularly, after meals; (3) mental changes: emotional, tearful, pessimistic, depressed, even melancholic mental states; (4) icteric scleræ and sublingual mucous membrane; (5) stools light in color; (6) urobilinogen high; (7) indican increased; (8) liver spots or petichiae or telangiectases above costal margins; (9) icterus index increased; (10) Van den Bergh disturbed. There may be an increase in uric acid, a diminution of urea and possibly an increase in cholesterol. A positive galactose test is highly suggestive of acute and extensive hepatocellular disease. Pratt and Stengel¹³ in reviewing cases of toxic cirrhosis state that they found digestive and nervous symptoms similar to those in portal cirrhosis. Varying degrees of involvement exist between the acute and chronic forms of toxic liver disease.

We have not touched upon alcoholic cirrhosis for the reason that the subject is, at present, one of keen debate. The rôle of alcohol in the development of alcoholic cirrhosis, so-called, is not clear since we find the same pathologic changes in individuals who have rarely, if ever, partaken of alcohol and occasionally in children in whom there is no question of the use of alcohol over a long period. Recent work (Greene et al.⁴) seems to indicate that the pathology is the result of the action of alcohol and bacteria or bacterial toxins. They believe that alcohol changes the mucosa of the intestine so that bacteria and bacterial toxins gain entrance to the portal circulation and set up an hepatitis of low grade with consequent proliferation of connective tissue.

Mallory considers phosphorus to be associated with alcohol in the production of alcoholic cirrhosis.

I would like to present three case histories

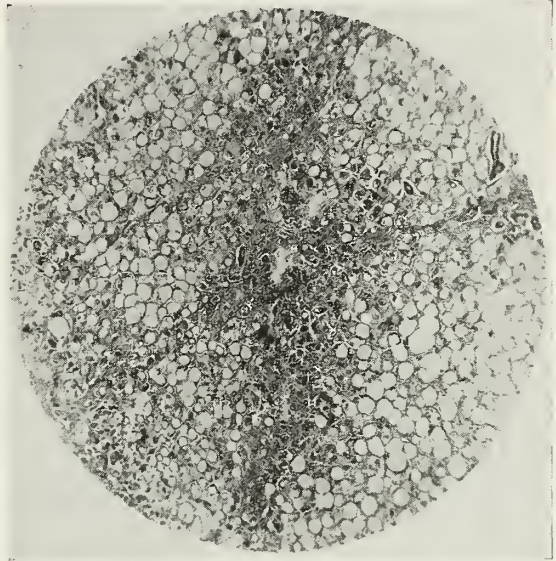


Fig. 1. Section of liver tissue in a case of acute necrosis of the liver following the use of a mercurial diuretic in an individual with pre-existing cirrhosis. Note the extreme effort at regeneration as shown by proliferation of small bile ducts.

of liver disease due to poisons. The first case is one of mercury poisoning causing acute necrosis of the liver in an individual with a pre-existing portal cirrhosis, probably of alcoholic origin (Fig. 1). The second is a case of cinchophen poisoning (Fig. 2) and the third, one of chloroform poisoning (Fig. 3). In the latter, there is evidence of an attempt at regeneration on the part of the liver.

Case 1.—Mrs. L. W., aged sixty-four, white, female, had complained of nausea and vomiting for one week. There was a history of excessive use of alcohol over the previous thirty years. Recently, she had been taking a proprietary sedative containing bromides. When first seen she was somewhat irrational. The arms and legs were thin, the abdomen was distended with fluid and the emphysematous chest contained many thick moist râles. The cardiac sounds were distant but there were no murmurs. The rate was 96, regular. Blood pressure was 100-70. The liver was not palpable. To reduce abdominal ascites, novasurol was given intramuscularly in the amount of 0.5 c.c. the first day, 1 c.c. the second day and 1 c.c. the fourth day. Diuresis was prompt. The abdominal ascites diminished. However, on the fifth day, the patient was roused only with difficulty. The skin became icteric and purpuric spots appeared over the body. The scleræ were markedly icteric and the conjunctivæ injected. The mucus membrane of the mouth and throat were yellow and dry. Moist râles were increased in the bases. Cardiac dullness was made out to the anterior axillary line on the left. Cardiac rate was 108 and there were occasional extra systoles. Blood pressure was 100-50. Intravenous glucose was given.

During the succeeding days somnolence increased but the patient could be roused at times. Jaundice deepened. On the tenth day, the liver was palpable 3 to 4 cms. below the costal margin. Levine tube feedings of glucose were tried. On the fourteenth day, bright red blood came from the Levine tube

absent. Serum protein was 8.2 mg., albumin 5.2, and globulin 3 mg. The Takata was negative. The galactose elimination was 8 gms. The fasting blood sugar was 80 and the blood nitrogen 53 mg.

The patient was the picture of extreme toxemia during the succeeding week. Her condition im-

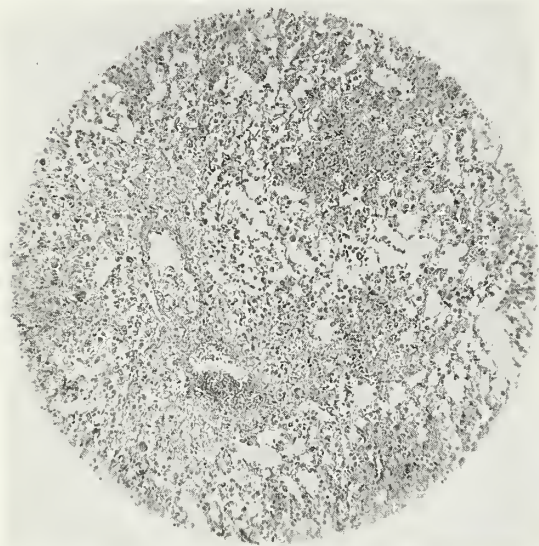


Fig. 2. Section of liver tissue in a case of cinchophen poisoning showing complete destruction of normal liver topography. Cytolysis and karyolysis of liver cells with regenerative hyperchromatism.



Fig. 3. Section of liver demonstrating the late results of chloroform poisoning. The necrotic areas are well organized and replaced by connective tissue. Regenerative attempts are seen in individual cells of the liver lobules.

and the tube was removed. Jaundice increased, coma deepened and there was anuria. The patient died on the twenty-second day of the illness.

Laboratory findings: Hemoglobin, 90 per cent. Erythrocytes, 4,170,000; leukocytes, 16,000. Polymorphonuclears 76, lymphocytes 20, monocytes 4. Urine: alkaline, S.G. 1.018, no albumen, sugar or acetone, bile +4. Microscopic examination revealed epithelial debris and amorphous phosphates. Blood cholesterol 333 mg. per 100 c.c. Cholesterol esters 110 mg. Free cholesterol 223 mg. vanden Bergh positive, direct and indirect. Icterus index 30. The stool, at first, contained bile; toward the termination of the case there was none.

Postmortem diagnosis: (1) Acute necrosis of the liver; (2) Hepatic cirrhosis; (3) Acute tubular nephritis; (4) Mercury poisoning.

Comment: This was apparently a case of cirrhosis which developed acute necrosis of the liver, possibly on a basis of mercury poisoning (novasurol).

Case 2.—N. K., white, female, aged thirty-eight, took a total of 150 grains of cinchophen over a period of 10 days for the relief of aching pains in the extremities. She then became nauseated and weak and noticed that her skin was yellow. The jaundice deepened and the stools became clay colored. The patient became drowsy and torpid and her skin showed a hemorrhagic rash well distributed over the body. On her admission examination the liver was 2 cms. below the right rib margin and was tender to light pressure. The cardiac rate was 70 p.m. and the temperature 98.8.

Laboratory findings on admission: Hemoglobin, 95 per cent. Red blood cells, 4,685,000. Leukocytes, 10,200. Polymorphonuclears 62 per cent, Sm. Monos. 28 per cent, Lg. Monos. 8 per cent. Basophils 1 per cent. Eosinophils 1 per cent. There was a positive direct and indirect vanden Bergh and serum bilirubin of 40 mg. per cent. Urobilinogen was

proved, however, so that at the end of two weeks the galactose was 5 gms. The serum bilirubin was 20 mg., and urobilinogen was present in a dilution of 1—20. The blood nitrogen was 42 mg. At the beginning of the fourth week the patient again became torpid; serum bilirubin increased to 60 mg.; and the galactose was 8 grams. The patient died in coma. Autopsy revealed a large boggy liver weighing 2,400 grams. The cut section had a mottled appearance—red on yellow—and bled very freely.

Postmortem diagnosis: Subacute red atrophy with beginning toxic cirrhosis.

Comment: A case of acute toxic hepatitis from the use of cinchophen in moderate amount.

Case 3.—H. S., Negro, male, aged thirty-six, during an alcoholic debauch by accident drank 6 ounces of chloroform. In twenty-four hours the scleræ became icteric. At the end of forty-eight hours the jaundice, as seen in the scleræ and mucous membranes of the mouth, was marked. The serum bilirubin was 60. The vanden Bergh positive, direct and indirect. Blood sugar 60 mg. Nitrogen 44 mg., urea 6 mg., galactose, 12 grams. Urobilinogen in the urine, negative. Stools, negative for bile. The patient remained in a toxic state for twelve days, at the end of which time the serum bilirubin diminished to 20 mg., the blood sugar increased to 90 mg. The blood nitrogen became 39 mg., and the blood urea 10 mg. Urine contained a trace of albumin and +4 bile. With these changes in the blood there was an improvement in the patient's general condition. Six weeks after the drinking of the chloroform the patient developed an acute upper respiratory infection, again became markedly toxic, somnolent, and irrational. The serum bilirubin rose to 60 mg., the blood nitrogen to 74 mg., and the blood urea fell again to 6 mg. The patient died in coma.

Postmortem diagnosis: Toxic cirrhosis.

Comment: A case of toxic cirrhosis due to ingestion of a large amount of chloroform.

I am indebted to Dr. Henry L. Bockus, Professor of Gastro-enterology, Graduate School of Medicine, University of Pennsylvania, for the privilege of using the last two cases.

My reason for bringing this subject to your attention is to accentuate the need for finding cases of toxic hepatitis early so that the ingress of the poisonous substance to the body may be eliminated and steps taken to aid the liver in its effort at regeneration before extreme toxic cirrhosis develops.

Much can be accomplished by prolonged supportive and symptomatic treatment. Large amounts of glucose are given into the vein practically continuously, for a long period. High carbohydrate diet is of great importance. Bollman and Mann,¹ as a result of their experiences in experimental physiology of the liver, state: "measures directed toward increasing the glycogen content of the liver appear to be of value in reducing the systemic effects of certain toxins, and they also appear to prevent further injury to the liver." Minot and Cutler^{10,11} have advised the use of calcium to protect the liver from carbon tetrachloride and chloroform. Morse¹² has observed calcium deficiency in acute hepatitis. C. H. Best has recently suggested the use of substances containing choline, such as egg yolk and yeast in combination with high carbohydrate diet (based on experimental phosphorus poisoning in dogs). Morphine and sedatives are ordinarily contra-indicated. In the acute stage of the disease daily transfusions of 250 to 300 c.c. of blood may be of benefit.

Summary

We have attempted to show that certain poisonous substances may enter the body and produce necrosis of the liver cells.

1. These poisonous substances may be inorganic or organic chemicals or bacterial toxins.

2. The patient may expire as a result of this poisoning in which case death may be due to acute necrosis of the liver.

3. If the patient survives the initial poisoning, the liver cells may regenerate even to the extent of carrying on normal liver function.

4. The appearance of such a liver with islands of regenerated liver tissue separated by stroma heavy in bile ducts is characteristic of toxic cirrhosis.

5. Treatment of both the acute and chronic forms of toxic liver disease is symptomatic and supportive. Glucose intravenously, blood transfusions and a high carbohydrate diet are of benefit. Calcium and choline in the form of egg yolk and yeast may prove to be of value in combating necrosis of the liver.

Bibliography

1. Bollman and Mann: Alterations in hepatic function produced by experimental hepatic lesions. *Ann. Int. Med.*, 9:5, 617, 1935.
2. Boyd: *Pathology of Internal Diseases*, 1935. pp. 319-340.
3. Copher and Dick: *Arch. Surg.*, 17:403, 1928.
4. Green, et al: *Arch. Int. Med.*, 55, (Apr.) 1935.
5. Judd and Beaver: Acute and subacute atrophy of the liver and the evolution of toxic cirrhosis. *Arch. Surg.*, 24:775-797, 1932.
6. Lyon: Differential diagnosis of diseases of the liver. *Ann. Int. Med.*, 9:258, 1935.
7. McCollum: *Textbook of Pathology*.
8. McIndoe and Counsellor: *Arch. Surg.*, 15:589, 1927.
9. Mallory: *Arch. Int. Med.*, 37:336, 1936. *Bull. Johns Hopkins Hosp.*, 22:69, 1911.
10. Minot, A. S.: Mechanism of hypoglycemia produced by guanidine and carbon tetrachloride poisoning and its relief by calcium medication. *Jour. Pharmacol. and Exper. Therapy*, 43:295-313, (Oct.) 1931.
11. Minot, A. S., and Cutler, J. T.: Guanidine retention and calcium reserve as antagonistic factors in carbon tetrachloride and chloroform poisoning. *Jour. Clin. Investigation*, 6:369-402, 1928.
12. Morse, P. F.: Personal communication.
13. Pratt and Stengel: *Am. Jour. Med. Sc.* 173:1, 1927.
14. Rich: Pathogenesis of forms of jaundice. *Bull. Johns Hopkins Hosp.*, 47:348-349, 1930.

OCULAR SYMPTOMS AND SIGNS OF BRAIN TUMOR*

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Brain tumor is much more common than is generally realized, consequently, should always be borne in mind as a possible cause of poor vision, headaches, vomiting, dizziness and other less frequent symptoms. Such neoplasms occur in children as well as in adults. In the diagnosis and localization of brain tumor the ocular symptoms and signs are of great importance. Ocular symptoms are common since embryologically the eye is a part of the brain, the optic nerve is really a brain tract, and the visual pathways extend from the anterior to the posterior end of the brain; furthermore, six of the twelve cranial nerves send all or a portion of their fibers to the eye and adnexa.

Ocular Signs of Brain Tumor

The common ocular signs of brain tumor may be due to generalized increase in intracranial pressure, or to localized pressure or destruction of normal tissue. These signs are choked discs, optic atrophy, visual field changes, paralysis of one or more of the extraocular muscles and nystagmus.

Choked Discs.—Edema of the optic nerves is so common in brain tumor that it constitutes, along with headaches and projectile vomiting, the so-called tumor syndrome. The importance of an ophthalmoscopic examination of the eye grounds goes without saying; certainly the practitioner should look at the ocular fundi during the course of every routine examination.

Choked discs are the result of increased intracranial pressure and occur in association with at least 80 per cent of brain tumors. The size of a neoplasm is not always the determining factor in the production of choked discs; a small tumor pressing on the aqueduct of Sylvius, or great vein of Galen and damming back the cerebrospinal fluid gives rise to early and pronounced edema of the optic nerves.

Edema of the nerve heads almost always occurs with tumors of the cerebellum, quadrigeminal plate, parieto-occipital lobes, third or fourth ventricles and with neoplasms along the base of the brain. Frontal or temporal lobe tumors usually give rise to choked discs. Neoplastic lesions of the pituitary body, pons, corpus collosum, subcortical areas or medulla rarely produce edema of the optic nerves; however, it may occur as a late symptom. The edema may be unilateral in the early stages but usually both nerve

heads are involved. Recognition of choked disc is ordinarily not difficult—the nerve head is enlarged, it is elevated above the level of the retina and protrudes slightly forward into the vitreous, it has a gray translucent wet appearance, the margins are blurred, hemorrhages may be present, and the retinal arteries are contracted and the veins engorged. Vision may be unaffected in the early stages, but eventually, with the development of secondary optic atrophy, the vision grows dim and finally the patient becomes blind. The visual field shows enlargement of the blind spot, and later concentric contraction.

Optic Atrophy.—Primary or secondary atrophy of the optic nerve with partial or complete loss of vision may be associated with brain tumor.

Primary atrophy is the result of pressure on the nerve in the subfrontal area or in the region of the optic chiasm. It occurs most commonly with tumors of the pituitary body; typically the temporal side of each nerve head assumes a pale waxy appearance. In complete primary atrophy the nerve head appears white or gray, the margins are unusually sharp, pathologic cupping is present and the vessels are normal.

Secondary atrophy follows prolonged choked disc. The nerve head is chalky white, the margins are irregular and somewhat indistinct, there is no cupping since the physiologic cup is filled in with glial and connective tissues, and the blood vessels are reduced in size.

Visual Field Changes.—The visual pathways, made up from before backward of the optic nerves, chiasm, optic tracts, lateral geniculate bodies, optic radiations, and visual cortex, extend from a position underlying the frontal lobes anteriorly to the extreme posterior end of the occipital lobes. Tumors in various areas throughout the

*From the Department of Ophthalmology, College of Medicine, State University of Iowa. Read before the seventy-first annual meeting of the Michigan State Medical Society.

brain may press on these pathways and give rise not only to symptoms indicating the presence of a neoplasm but also to changes which are of definite value in localizing the position of the lesion.

Pressure on the optic nerve affects the field of vision in only one eye, whereas a similar lesion in any other part of the visual pathway affects the field in both eyes. A unilateral central scotoma, concentric contraction of the visual field or even complete loss of the field in one eye as a result of pressure on the nerve may occur from a tumor of the frontal lobe or pituitary body.

Pressure on the chiasm is said to give rise typically to a bitemporal hemianopsia, i.e., to a loss of vision over the temporal field in each eye. In actual practice visual field loss associated with chiasmal pressure usually begins in the upper temporal quadrant of each field; it gradually extends over the temporal fields, usually more rapidly on one side than on the other, and, at the stage at which it is most frequently discovered, the vision on one side is almost gone and only the nasal field remains on the other side. Chiasmal pressure is most frequently due to a tumor of the pituitary body or a cyst or neoplasm in the suprasellar area; it may occasionally result from dilatation of the third ventricle as a result of a tumor in a remote area.

Pressure on the visual pathway of one side posterior to the chiasm results in homonymous defects in the visual fields. These defects may occupy small areas, quadrants or entire halves of the visual fields.

Pressure on the optic tract results in homonymous hemianopsia, i.e., loss of the right or left half of the field of vision in each eye. The vision is usually poor since the blind area passes directly through the point of fixation. Wernicke's pupillary phenomenon is present, i.e., the pupil fails to contract to light thrown on the blind half of the retina.

If the lateral geniculate body is involved the visual field changes are similar to those in lesions of the optic tract.

The fibers of the optic radiation pass through the posterior limb of the internal capsule, bend backwards in the temporal lobe and end at the posterior pole of the occipital lobe, consequently, temporal, parietal or occipital lobe tumors very frequently affect the fields of vision. Homonymous scotomata, homonymous quadrant defects or

homonymous hemianopsia may result. Usually the macula is spared and good central vision is retained. Wernicke's pupillary phenomenon is absent, i.e., the pupil contracts to light thrown on the blind half of the retina.

Paralysis of the Cranial Nerves.—The third, fourth and sixth cranial nerves supply the muscles which rotate the eyeball. Pressure or destruction of one or more of these nerves is not extremely common in brain tumor but if it does occur it results in limitation of ocular movements and double vision.

Disturbance of the fifth or seventh nerve is rare; lesions of the fifth result in disturbances of sensation over the side of the face and seventh nerve lesions result in inability to close the eyelids.

Spasm or paralysis of conjugate movements of the eyes is rare in brain tumor but may occur with a lesion of the midbrain, pons or motor cortex. Paralysis of upward rotation is associated with quadrigeminal plate lesions.

Tumors in Special Areas

Tumors in certain localized areas of the brain commonly tend to produce the following ocular signs:

Frontal lobe.—Choked discs are common. A syndrome which is supposedly characteristic of frontal lobe tumors has been described by Kennedy—central scotoma and optic atrophy on the side of the tumor and choked disc on the opposite side. Paralysis of the ocular muscles may occur with a tumor at the base. Conjugate deviation of the eyes is rare.

Pituitary Body and Suprasellar Area.—Bitemporal defects in the visual fields and pallor of the temporal sides of the optic nerves are typical. Total optic atrophy may eventually follow. Choked discs are rare in pituitary tumors but may be present with suprasellar growths.

Parietal Lobe.—Choked discs and homonymous hemianopsia may occur with lesions in this region.

Temporal Lobe.—Choked discs and homonymous defects in the fields of vision are common. There may be visual hallucinations. The pupil on the side of the lesion is occasionally dilated and fixed.

Occipital Lobe.—Choked discs and homonymous defects in the visual fields are frequent; the field defects may be scotoma-

ta, quadrant or half field defects. Visual hallucinations may occur.

Cerebellum.—Choked discs come on early and are usually prominent. In the late stages of paralysis of the sixth or seventh nerve may appear.

Midbrain.—Third nerve paralysis is not infrequent; choked discs may follow a tumor of the corpora quadrigemina or pineal body.

Quadrigeminal Plate.—Early choked discs and in some cases paralysis of upward movements, other disturbances of rotation and fixed dilated pupils. Nystagmus occasionally.

Third and Fourth Ventricle.—Early choked discs.

Pons.—Paralysis of lateral gaze. Bilateral sixth nerve paralysis. Combination of paralysis of the fifth, sixth and seventh nerves, vertical nystagmus and changes in the pupillary reactions.

Cerebellopontine Angle.—Paralysis of the sixth and seventh nerves; nystagmus may appear. Choked discs occur in the late stages if at all.

Basal Ganglia.—Homonymous hemianopia and nystagmus.

Medulla.—Rarely miosis and slight ptosis (Horner's syndrome) may occur.

Base of Brain.—Paralysis of the third, fourth or sixth nerves with limitation of ocular rotations. Optic atrophy with lesions in the anterior fossa and choked discs with those of the middle or posterior fossa.

Conclusions

A careful study of the eyes, including ophthalmoscopic examination of the fundi and perimetric studies of the fields of vision, should be made in every case of suspected brain tumor since such lesions so frequently produce ocular changes which may not only indicate a general increase in intracranial pressure but also may be of value in localizing the tumor.

INCIDENCE OF SEIZURES IN THE FAMILIES OF EXTRAMURAL PATIENTS WITH EPILEPSY*

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The more recent statistical studies on epilepsy tend to confirm the general observation that heredity plays a less important rôle in well adjusted extramural cases than in deteriorated institutional patients. In a survey of 1,000 institutionalized patients Stein³ reported a strikingly higher incidence of seizures and neuropathic traits in the families of these patients than in a comparable group of non-epileptic controls. A recent study by Paskind and Brown² revealed that the incidence of seizures in the families of 331 adult non-deteriorated epileptic patients was substantially lower than the values given by other investigators for deteriorated, institutional patients.

The subject of heredity in epilepsy comes up frequently in general practice because the great majority of epileptic patients are found outside of institution walls. With regard to the situation in Michigan, a survey by Anderson¹ in 1933 indicated that there are approximately 10,100 epileptic individuals in the state, and of this number only 16 per cent are confined to institutions. Some 8,500 extramural patients are thus living in various communities of the state.

The present study is based on an analysis of the family histories of 1,000 extramural patients with epileptic seizures who were examined at the University Hospital in the

course of the past eleven years. All of these cases had been definitely diagnosed grand or petit mal epilepsy, and only those were selected where there was adequate information as to the presence or absence of seizures in at least all members of the immediate family. The figures for siblings and children were based on the number living at the time the patients were examined, but also include deceased relatives in whom seizures had occurred. The term "seizures" as it is applied to patients' relatives includes all cases of generalized or localized convulsions with unconsciousness, petit mal attacks, and infantile convulsions.

Table I presents a classification of the cases according to sex, type of attacks, and etiology. It will be observed that the inci-

*From the Neurological Clinic of Dr. C. H. Camp, University of Michigan.

TABLE I

	No. of Cases	IMMEDIATE FAMILY			TOTAL RELATIVES		
		Patients with positive history	Per Cent with positive history	No. in family with seizures	Patients with positive history	Per Cent with positive history	No. of relatives with seizures
Males	577	43	7.4	53	73	12.7	93
Females	423	37	8.7	42	59	13.7	74
Grand Mal	842	72	8.5	84	116	13.7	146
Petit Mal	158	8	5.1	11	16	10.1	21
Idiopathic	647	60	9.3	72	101	15.6	130
Symptomatic	353	20	5.1	23	31	8.8	37
Total	1000	80	8.0	95	132	13.2	167

dence of seizures in near relatives (parents, siblings, and children) is in all cases slightly higher than in the distant kin (grandparents, uncles, aunts, and cousins). There is a slightly higher hereditary incidence among females than males, both in the immediate family and in the total number of relatives. Seizures occurred oftener in relatives of patients with grand mal attacks than in the relatives of those who had petit mal unaccompanied by major seizures. It is significant that the highest familiar incidence—9.3 per cent in the immediate family group and 15.6 per cent for total relatives—occurred in the so-called “idiopathic” cases, i.e., the large group for which no etiology could be found. These figures are, in fact, higher than the average values of 8.0 per cent and 13.2 per cent, respectively, for the entire series.

In Table II the data are arranged to show the detailed incidence of seizures among immediate and distant relatives. It will be seen that 3.8 per cent of the patients gave a history of seizures in parents, the incidence being practically equal in fathers and mothers. Seizures occurred in 52 out of 2,643, or 1.9 per cent, of the total number of siblings of 688 patients who had brothers and sisters. There were 418 offspring among the 162 patients who had children, but only three of them had a total of five children with seizures, giving an incidence of 1.2 per cent. Eighty patients had 95 members of the immediate family with seizures, and 52 had 72 distant relatives with seizures. Stated in another way, among the total of 5,061 parents, siblings, and children related to the 1,000 patients, there were 95 individuals, or 1.9 per cent, who had seizures. There was a

TABLE II

	No. with Seizures	Per Cent
Fathers (1,000).....	20	2.0
Mothers (1,000).....	18	1.8
Parents (total) (2,000).....	38	1.9
Patients or families with siblings (688).....	47	6.8
Total number of siblings (2,643).....	52	1.9
Patients with children (162).....	3	1.8
Total number of offspring (418).....	5	1.2
Immediate family only (parents, siblings, and children) per 1,000 patients	80	8.0
Total number of parents, siblings, and children (5,061).....	95	1.9
Relatives other than parents, siblings, and children	72	7.2
Total near and distant relatives of 1,000 patients	167	16.7

total of 167 known near and distant relatives of the 1,000 patients who had seizures.

Summary

In an unselected group of 1,000 extramural patients with epilepsy, seizures occurred among members of the immediate family (parents, siblings, and children) in 8.0 per cent, and among all known near and distant relatives in 13.2 per cent. The greatest familial incidence occurred in the large group in which no cause for the attacks could be found.

A comparison of the values determined for these cases with other reports in the literature would indicate that in general the hereditary incidence of seizures among extramural patients stands midway between the value for non-epileptic controls and that for institutionalized patients.

References

1. Anderson, C. L.: Epilepsy in the State of Michigan. *Mental Hygiene*, 20:441, (July) 1936.
2. Paskind, H. A., and Brown, M.: Hereditary factors in epilepsy; differences between deteriorated and non-deteriorated patients. *Jour. A. M. A.*, 108:1599, (May 8) 1937.
3. Stein, C.: Hereditary factors in epilepsy: Comparative study of 1000 institutional epileptics and 1115 non-epileptic controls. *Am. Jour. Psychiat.*, 12:989, (March) 1933.

CANNABIS SATIVA

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One of the most difficult problems confronting the medical profession at the present time seems to lie in the addiction, particularly of the young people of this country, to the use of various preparations of Cannabis, or hemp, commonly known by its Mexican name of marihuana, and sold under a great variety of trade names. This is probably the most extensively used euphoric drug in the world. According to Chopra, the East Indian therapist, its use is quite general among the peoples of the Orient, both in Asia and in Africa, and is of very long standing, considerably pre-dating the Christian era.

The plant has been cultivated for a variety of purposes, probably at first for its fibers and for the seeds which contain a fixed oil useful in the mixing of paints and varnishes. I have in my library a Bible published by subscription in Boston in 1793, in which the names and occupations of the subscribers are given. Some of these are listed as rope-makers, and at that time this was probably a lucrative occupation, as New England was essentially maritime, and there must have been a great demand for cordage to be used in the rigging of sailing ships. Moreover, the laws were more rigidly enforced in those days than they are today, the public executioner being an important personage in the community, so that there was a fairly constant demand for hangmen's ropes. The demand thus produced probably led to the cultivation of hemp in this country, which seems to have been most extensively carried on in Kentucky. The industry, as a matter of record, was established there about 1775, and continued until other more profitable crops displaced the hemp. There seems to be no doubt that the plant was first cultivated in this country for the fiber and seeds, the latter of which, in addition to the expression of their oil, became an important ingredient in mixtures of bird seed. In Kentucky, as cultivation was gradually discontinued, the plant seems to have escaped and run wild, and large areas may be found at the present time which appear to be entirely taken over by the plant. In proper soil, it grows to a height of 8 or 10 feet, and the plants form an important food supply for numerous insects, notably the great swallow-tailed butterflies. These appear to be more or less stupefied, probably by the nectar which they imbibe, and are very much easier to catch than they otherwise are. It is a matter of observation that preparations made from the leaves and flow-

ering tops of the plant are, as a rule, depressant to the lower animals, and excitant to those in the higher phyla.

When the drug is used for euphoric purposes, it is smoked or else liquid preparations are consumed as a beverage. Investigations have shown that the leaves and the flowering tops, especially of the female plant, contain among other ingredients an alcohol-soluble resin, known as cannabinal, which is believed to be the source of the depressant effect of the drug. Like all narcotic and habit-forming drugs, the first effect, whether the material be smoked or otherwise introduced to the system, is a depression of inhibitions, so that the victim passes out of the control which his cerebral cortex normally exercises, and becomes highly and dangerously excited. This stage of excitement gradually passes into a condition of profound stupor which may or may not be associated with more or less vivid dreams. On emerging from this condition, which may last for several hours, the stage of excitement recurs but usually in a less degree, and the subject gradually returns to normal, it is said without experiencing the unpleasant sensations associated with the use of the opium or alcoholic derivatives. The appetite for the drug gradually increases as its use is continued, until the victims are willing to make almost any sacrifice to secure a supply.

In this country the drug is usually smoked in the form of cigarettes, which are sold largely to children of school age, whose nervous systems readily yield to its pernicious effects. It appears to have less influence over older people, and the demand seems to be less among adults than among children. Treatment in the case of this, as of all other narcotics, is extremely difficult, and cannot be brought about by the administration of

other drugs. Of course, the ideal treatment seems to consist of complete isolation, so that the drug cannot be secured. If this can be managed and the victim can receive adequate nourishment, together with the proper amount of exercise and fresh air, it may be that he can be restored to normalcy, in which case his craving will be reduced. And the time may come when his desire for this or any other abnormal substance will cease to exist. It should always be remembered that the trouble lies not so much in the drug as in the patient, who, if he were perfectly normal, would probably never have acquired the appetite, and will probably lose the same if he can be brought into a state of physical good health.

After the general practitioner has, through his ministrations, accomplished this, it is wise to call in a psychiatrist, in order that any underlying mental conflict may be more effectively combatted and resolved.

It appears that a certain racial tolerance may be developed for this as for other drugs. It seems certain that its bad effects are more readily produced when it is used by members of the Caucasian race than when it is the addiction of the Oriental races. The importation of the leaves and blossoms has been prohibited in various

countries on account of the mental degeneration which follows upon its use. But a fact-finding committee, established many years ago, has stated that its moderate use does not seem to produce any bad effects. Moderation, however, is apparently not associated with the use of the drug in this country; and inhibitions are not characteristic of youth.

Probably the occurrence of the plant in various backyards and on vacant lots is due to the throwing out of refuse from bird cages. This refuse usually consists in large part of hemp seed, which in a favorable environment takes root and grows. *Cannabis sativa*, although admitted to the British and United States Pharmacopeias, has been relegated to a position of comparative therapeutic unimportance, its depressant effects being better produced by a variety of substances, synthetic and otherwise. Probably the commonest therapeutic preparation is the fluid extract, but on account of deterioration it is difficult to secure this in the open market, and it should undergo biological standardization before being used. The British Pharmacopeia requires that *Cannabis* should come from India, but the United States Pharmacopeia does not specify the origin of the crude drug.

INTRANASAL ADMINISTRATION OF A PERTUSSIS ANTIGEN

S. S. SCHOOTEN, B.S., M.D.

DETROIT, MICHIGAN

In the fall of 1936 our attention was called to a soluble antigen prepared from *Hemophilus pertussis* for the treatment of whooping cough. This antigen was to be delivered by the intranasal route. In an age of hypodermic medication, with so many children needle conscious, it was a welcome departure. The simplicity of administration and reported freedom from reactions would add greatly to its use.

There was no attempt to report a large number of cases. The twenty cases recorded are those which occurred in a pediatric practice during the months of November, 1936, through April, 1937. Of special note is the fact that six of these patients were under two months of age, this being a serious time to experience whooping cough. Grandma N, aged sixty-four, was added for interest.

No other disease of infancy and early childhood varies more in severity and duration than whooping cough. This fact alone makes it hard to evaluate a therapeutic measure. For no other infectious disease have so many curative agents been suggested. Of the specific agents, vaccine therapy has

been used for twenty-five years. More recently immune serum has been introduced. Both have much to commend them, neither can be depended upon for all cases, while immune serum is not always available. Because of these facts, any new agent promising relief is whole-heartedly received.

The product used in this series of cases was prepared by Sharp and Dohme in their Mulford Biological Laboratory. The product is standardized to include all the soluble

protein of approximately 20,000 million organisms to each c.c. It is distributed in 5 c.c. stopper vials. The product is non-irritating, and we found less objection from the little patients than is usual with the nose drops prescribed.

The number of treatments in this series averaged six per patient. Each patient received roughly the soluble antigen derived from 40,000 million organisms. This is of interest because Sauer in his vaccine for immunization uses a freshly prepared solution of 10,000 million organisms per c.c. He advises 8 c.c. be given divided in three doses over a period of three weeks, or the product of 80,000 million organisms. Our treatment delivered one-half this dose in one week.

We regret the absence of controls in this series. In several instances there were previous untreated patients in the same family. With two exceptions there were relatives or neighbors' children who were ill with the disease at the same time. Many of these we were able to contact. The parents of these children without exception felt the course of the disease was more severe and from one to three weeks longer in the untreated cases.

We were happy to note an absence of complications. A great many of our other patients with nasopharyngeal and upper respiratory infections were complicated with otitis media and glandular enlargement during this period. The one death from pneumonia may be excluded, for the infection was well advanced before treatment was begun. The clinical course of the small infants for whom therapy was begun early in the disease was gratifying.

Case Reports

Case 1.—Jean N., four years old, had been coughing for a period of six days. She had a paroxysm every half hour. For two days she had not been able to retain food. The following was prescribed: intranasal antigen 10 drops in each nostril every twenty-four hours and $\frac{1}{4}$ grain of luminal every four hours, with rest in bed. After the second treatment with antigen, the paroxysms were less severe and after the third dose, the number had decreased to four daily. Five treatments were given and by the end of the fourteenth day the cough which occurred was nonspasmodic. She continued to cough for nine days following the last dose of antigen.

Case 2.—Shirley N., aged six years, was a sister of Jean N. She began to cough on January 11. Antigen was begun at once. The mother and grandmother recall seven paroxysms. However, when the child was excited, a cough developed and this appeared at such times for a period of twenty days. During the first week cough plates were positive. Later ones were negative. In the second week her leukocyte count was 76,000, neutrophils 22 per cent,

small lymphocytes 72 per cent, eosinophils 1 per cent, transitionals 4 per cent, macrocytes 1 per cent. The father declares Shirley did not have whooping cough because of the mild course of the infection.

Case 3.—Mrs. J. N., aged sixty-four, was the grandmother of Jean N. and Shirley N. She had nursed the two children. She had never had the disease. On January 16 she started to cough. Whooping cough was not suspected as she had always had bronchial coughs during the winter months. On February 1 her daughter suggested antigen and started to treat her mother herself. She used 15 drops in each nostril since she had given 10 drops to the children. On February 3 there was a marked decrease in the severity of symptoms. When her daughter reported this experience to us, a blood count was asked for. The blood count read: Leukocytes 84,000, neutrophils 21 per cent, small lymphocytes 61 per cent, large lymphocytes 11 per cent, transitionals 4 per cent, eosinophils 2 per cent. She continued to cough for three weeks, but states the attack was less severe than her "usual winter cough."

Cases 4 and 5.—Mary Ann C. and Bill C., aged four and six years respectively, were exposed to whooping cough at a birthday party February 6. Because of the known exposure, the first symptoms were looked for. On February 14 intranasal antigen was started, both children coughed but no "whoop" was noted. A spasmodic cough occurred about two to three times a day. The night sleep was not disturbed. On February 19 a hard cough was obtained by tracheal compression and a positive culture returned on Bill. Mary Ann's cultures were negative. On February 26 blood counts were taken on both children. Mary Ann had a leukocyte count of 94,800 cells, neutrophils 18 per cent, lymphocytes 78 per cent, eosinophils 2 per cent, and transitionals 2 per cent. Bill's count was similar. The clinical course of both children was so mild that parents and neighbors doubted the diagnosis. This is significant because on February 28 a baby brother was born. Ten days after this event, the mother was advised to leave the baby at the hospital because of the probability of contracting whooping cough at home. This advice was not heeded. Three weeks later, on April 2, we were called to see the baby. The mother admitted having called another physician because the baby "got blue and almost choked." A thymus had been suspected and a roentgen treatment given. There was no change in the symptoms after this procedure. Antigen—10 drops in each nostril—was begun on the seventh day of cough. Seven doses were given at twenty-four hour intervals. The infant averaged five spasmodic attacks a day, began to gain after treatment was started, and made an uneventful recovery after twenty days.

Case 6.—Baby Bernard T., aged two months, had been ill for twelve days when first seen in consultation. A diagnosis of bilateral broncho-pneumonia and whooping-cough was made following clinical examination. The parents refused hospitalization because they could not afford an oxygen tent. The coughing was continuous, paroxysms occurring every fifteen to twenty minutes. The baby had not slept for three days. Antigen was given, no other change in the régime ordered. Six hours after treatment the baby slept for three hours. Antigen, 20 drops, was repeated in twelve hours. It was then given every twenty-four hours for eight doses. The baby died ten days later.

Case 7.—Max K., an eighteen-day old baby, was born at home where a little sister was recovering from a severe case of whooping cough. When first seen he had been ill for five days. He was unable to retain food and was one pound below birth weight. A paroxysm occurred every time the baby was moved or fed. Intranasal antigen, 20 drops, was begun March 3, and given daily for six doses. The

vomiting and cough decreased, but continued until March 26 when the mother reported that the infant had not coughed for twenty-four hours. The last ten days the infant averaged a daily 2 ounce gain.

Case 8.—Walter was six weeks old at the time of our first medical visit. He had been ill for a period of nine days. He was coughing at one-half hour intervals while awake. He could not nurse or retain feedings. We obtained a history of exposure to whooping cough through a neighbor's child. After intranasal antigen, 20 drops, daily for several days, the paroxysms were less severe, still occurring at one-half hour intervals. Eight doses of antigen were given. Although the cough lasted 28 days, the infection was uncomplicated. The father developed pneumonia during the infant's convalescence.

Cases 9 and 10.—Winifred S., seven years old, and Beth S., seven months old, had been coughing twenty and nine days respectively. They had visited a physician's office on two occasions but no cough was noted or elicited. There was no history of exposure to whooping cough. In spite of cough mixtures, Winifred showed no improvement. A blood count on Winifred was diagnostic. She had 120,000 total leukocytes and her differential showed 65 per cent small lymphocytes. Although it was late in the disease, the antigen was given: 20 drops intranasally. In twenty-four hours the symptoms were less severe. Treatment was continued for five days. She continued to cough for fifteen days.

The baby was having eleven paroxysms a day. After treatment with intranasal antigen, these were reduced to five. They were less severe. She was given six treatments. Her cough lasted 19 days after treatment was started.

Case 11.—Sally F., aged six weeks, was born into a family in which whooping cough had been affecting one or more of seven siblings for a period of three months. For the first few weeks the infant was well isolated. During the fourth week Sally was christened and the entire family attended this event. In spite of previous experience, Sally was coughing hard before it was reported. Treatment was started nine days after onset of cough. She received five doses of 20 drops a dose. Improvement was noticed following the third treatment. The total duration of illness after treatment was seventeen days. This compares favorably with the average period of thirty-eight days of cough experienced by her four sisters.

Cases 12 and 13.—Harold and Dorothy, twins, aged six years, were the children of a nurse who treated them herself symptomatically for eight days. At this time they were having a severe paroxysm every hour and a half. Both children averaged five paroxysms a night. Antigen was started on the eighth day. Each child received six treatments. At the end of the sixteenth and nineteenth day, respectively, no further cough was noted. Improvement was seen by the fourth treatment, with spasmodic coughing spells reduced to every four hours. The mother stated that although some paroxysms were severe after treatment, "they had lost their sharp edge."

Cases 14 and 15.—Billy F., aged four, and Marion, aged six, were sent to the home of a relative, while the mother was confined in the hospital. Both children were exposed to a neighbor's child. At the end of two weeks the family was reunited and a new baby brother had joined the family circle. There was no knowledge on the part of the parents of the children's exposure to whooping cough. Both children developed a "cold." Marion's exclusion from school by a school nurse was the first time whooping cough was suspected. Cough plates and later a blood count verified the diagnosis. Pertussis antigen was given to both children and was begun on the tenth day of Marion's cough. The spasmodic cough occurred every two hours and it was

very severe. There was very little change noted for four days so that she was put to bed and symptomatic treatment given. Billy fared better. He had had a frequent cough with a characteristic whoop for four days, but he did not vomit nor was he exhausted after each paroxysm. His cough lasted a total of twenty-two days.

The baby began to cough when five weeks old. Intranasal antigen was begun at once and given daily for four doses. The cough continued for 27 days, but at no time was it alarming. This was in marked contrast to the experience of a neighbor living in the same house upstairs with her nine months old baby. The neighbor's baby coughed at twenty to thirty minute intervals, was unable to retain food, did not sleep at night and lost weight rapidly. Sedatives were of little avail. Her physician gave her daily "shots" for twelve days. At the end of forty-two days, when we made a check visit on our patient, the little neighbor was "still coughing hard."

Cases 16, 17 and 18.—Jean, Edith and Beverly, age eight years, six years and six months, respectively, were sisters. Jean contracted whooping cough from her little playmates. When first called Jean had been coughing for fifteen days. Her spasms were very severe, occurring hourly. Edith was coughing five times a day and vomiting each time; she had been ill six days and lost 5 pounds. Baby Beverly had had two severe paroxysms in the last forty-eight hours. Neighbors' suggestions and every available cough mixture had been tried. Intranasal antigen was given at the time of the first medical visit. It was difficult to get Jean quiet long enough to give the treatment. After the first twenty-hour hours there was a marked change in the severity of the symptoms. Rest and inhalations may have been a factor in this case. Edith stopped vomiting after the third treatment. The baby did not have a hard cough after the third treatment. This group illustrates the advantage of early institution of therapy. The little playmate, from whom Jean contracted whooping cough, developed pneumonia, and later, empyema. She was hospitalized seven weeks. Beverly and Edith averaged twenty-five days of coughing. Jean coughed thirty-two days.

Summary

1. Twenty cases of whooping cough treated with pertussis soluble antigen are submitted.
2. Nine patients were under a year of age, six under two months.
3. Nine patients were in the first week of the disease, seven were in the second week of illness and four were ill over fifteen days when treatment was started.
4. The antigen, 10 drops in each nostril, was given daily from four to nine times, the majority receiving six doses.
5. Marked improvement was noticed in ten cases, or 50 per cent; definite improvement occurred in eight cases, or 40 per cent; questionable or no improvement in two cases, or 10 per cent.
6. The clinical improvement noted among the majority of patients receiving pertussis soluble antigen was encouraging and warrants its further trial and use by others.

AUTOGENOUS VACCINES IN HAY FEVER*

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LANSING, MICHIGAN

This paper is a preliminary report of my experience with the use of autogenous vaccines in the treatment of unselected cases of hay fever of varying degrees and the clinical results obtained. About one-third of these hay-fever cases were associated with hay-fever asthma. Three years ago, while using autogenous vaccine in the treatment of sinusitis, I was impressed by the fact that some of these patients, who also suffered from hay fever, were apparently relieved from their hay-fever symptoms. In the fall of 1934, selecting eight patients who had been treated by the pre-seasonal hay-fever vaccine without results, I used autogenous vaccine. Seven were completely relieved from their symptoms in from two to six treatments; one showed some improvement. Of the seven, six showed only slight or no symptoms for two years. Of twenty-five cases treated in 1935, twenty patients, or approximately 80 per cent, showed marked improvement, three showed some improvement, and two showed no improvement. Of eighty cases treated in 1936, seventy-two, or 90 per cent, showed marked improvement—six patients showed some improvement and two cases showed no improvement. Relief was obtained in many cases after the first three or four injections.

It seems that the more severe the hay fever, and especially when associated with asthma, the greater the relief experienced. No attempt at pollen desensitization was made, although many of these patients had had this done in previous years without relief.

The vaccine is prepared from the nasal discharge during the hay-fever season, and it is given subcutaneously in varying doses from one-eighth to two cubic centimeters, depending upon the reaction, at intervals of two or three days and continued until relief is obtained. In many cases this was obtained in three or four doses, following which doses were given at longer intervals to maintain their action. No treatments are given two days in succession, as the negative phases develop the day following an injection, during which time the patient does not respond to vaccine stimulation.

The vaccine is not used in pre-seasonal doses, as its object is to control acute exacerbation during the hay-fever season. Only a few local reactions and no general reactions resulted from these treatments. The average age of the patients was thirty-three; the

youngest patient was five and the oldest sixty-six. I sent out questionnaires to these patients, following the season, requesting a history of their case. I received about twenty-nine letters, of which twenty-five were definitely favorable, three uncertain, and one unfavorable.

A review of the literature supplied by the library of the American Medical Association and from what I have been able to find in texts, shows a surprising scarcity of reports on this form of treatment.

1. Cox in *The Military Surgeon* shows 78 per cent of thirty cases of nasal allergy cured by this form of treatment.

2. Mackey in *The British Medical Journal* reports 66 per cent cure in seasonal nasal catarrh.

3. Fitzgerald in the *Medical Journal of Australia* reports seven cases cured.

4. Ballinger in his book, "Diseases of the Nose, Throat, and Ear," reports several cases of hay fever cured by autogenous vaccines.

5. Hansel in his book on "Allergy of the Nose and Paranasal Sinuses" states that, "as yet, no comprehensive reports have been published on the use of autogenous vaccine in nasal cases," but mentions their value in cases of bacterial allergy.

I shall not attempt to explain the results which I have had in many cases except that they are probably due to an immunization process on the basis of bacterial allergy. I realize that this treatment is still experimental, but feel that the results obtained are sufficient to warrant the continued use of autogenous vaccines. It is probable that a combination of this form of treatment with pollen and associated allergen desensitization will effect satisfactory results in cases not helped by either alone.

*Read before the staff of the Sparrow Hospital, Lansing, June 1, 1937.

Summary

1. Many of these patients had received pollen desensitization treatment in previous years without success.

2. The treatments are usually of shorter duration than the pre-seasonal treatments.

3. Seventy-two per cent treated three

years ago were apparently symptom-free for the past two years. Sixty per cent of the patients treated two years ago were symptom-free last year.

4. The vaccine produces, in addition to direct, also a "collateral" immunization in a small percentage of cases.

Complications of Peptic Ulcer and Their Treatment: Clinical Lecture at Atlantic City Session

FRED H. KRUSE, San Francisco (*Journal A. M. A.*, Sept. 11, 1937), considers briefly the most common complications of peptic ulcer. 1. In the University of California Hospital series of 575 cases of peptic ulcer recently reviewed, hemorrhages occurred in 28 per cent of the cases of duodenal ulcer and in 28 per cent of the cases of gastric ulcer. When a chronic peptic ulcer bleeds, the source of the blood is generally small blood vessels, most frequently an artery that has become eroded. In cases of massive hemorrhage, a ruptured vessel on the lesser curvature or posterior wall of the stomach or on the posterior wall of the duodenum is usually the cause. The tendency to bleed is frequently a characteristic of the individual patient due to early scurvy or a so-called bleeding diathesis not directly related to any demonstrable blood dyscrasia. Experience teaches that the treatment of moderate or even of extensive hemorrhage should be medical. 2. When alkalosis develops in the course of intensive treatment with alkalis, symptoms may occur from the first to the fourteenth day, though they are generally noted from the fifth to the tenth day. Occasionally these symptoms disappear spontaneously. The treatment would appear to be obvious. Occasionally death ensues, but, as a rule, the symptoms never become very severe if recognized reasonably early, and they disappear rapidly when the administration of alkalis is discontinued. 3. As judged by some form of retention of barium sulfate or food in the stomach beyond the normal time, 51 per cent of peptic ulcers show some obstructive characteristics, yet further analysis of these cases indicates that organic factors producing chronic obstruction exist in only about 20 per cent. Obstruction in cases of peptic ulcer may be acute and temporary of chronic and prolonged. All grades of obstruction are produced by the varying factors of (1) spasm, (2) edema and inflammation or (3) the more permanent type of pyloric fibrosis and hypertrophy. Patients in whom this syndrome develops should be placed at rest in a hospital. Evacuation of the stomach by tube, a dietary regimen and medical management should be instituted. As soluble alkalis may be contraindicated because of alkalosis, they should be used with great caution; the neutral or tribasic powders may be used instead. 4. Hypersecretion, with its typical accompaniment of nocturnal pain and

the duodenal syndrome, is practically always associated with the circumstances described in the discussion of obstruction. Duodenal ulcer and obstruction of some type are the usual causes; but now and then one encounters an unusually "hypertonic" person with marked peristalsis, a neurotic make-up and excessive pylorospasm who exhibits functional influences to a marked degree without much evidence of six hour retention of barium sulfate. In such a case, rest in bed, management of the ulcer, evacuation by tube at night and liberal use of derivatives of belladonna and sedatives are necessary for control. 5. Peptic ulcers perforate or break through the parietal peritoneum in various ways. Perforations are designated acute, subacute or chronic. The first type is sudden and dramatic; the last is insidious and hardly recognizable clinically. Immediate surgical intervention is imperative for acute perforation (4 per cent), and the mortality should not exceed 5 per cent in patients operated on within eight hours of perforation. After eight hours, the mortality rises rapidly. Subacute and chronic perforation occurred in ninety-two, or 16 per cent, of the 575 cases. Although subacute perforation presents symptoms identical with those of acute perforation, they are less intense. The shock is less. The temperature is not subnormal. From the first rigidity and tenderness are most marked in the neighborhood of the ulcer, and after some hours they generally become localized in the right upper quadrant, simulating the signs of acute inflammation of the gallbladder, for which the condition is often mistaken. No symptoms of general peritonitis develop, but a localized abscess may form later. Usually if the patient is starved and kept quiet all the symptoms subside, and in twenty-four hours he is fairly comfortable, although local pain and tenderness and a certain amount of rigidity may persist for days and even continue until a local abscess is drained. If this is present it should be allowed to wall off first. It is usually best not to operate unless later developments indicate the need clearly. Chronic perforation occurs only in cases of old, chronic ulcers, and it is often very difficult to tell whether one is dealing with only a deep crater or penetration into the wall of the viscus or whether the ulcer has completely passed through the organ, with a walled off perforation beyond. Roentgenograms are the only diagnostic resource with any degree of certainty. The treatment is usually medical or whatever is needed for the type of chronic ulcer found.

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NOVEMBER, 1937

"Every man owes some of his time to the up-building of the profession to which he belongs."

—THEODORE ROOSEVELT.

EDITORIAL

SEVENTY-SECOND ANNUAL MEETING

IT seems to be a yearly custom among medical editors to proclaim the latest annual meeting of the state medical society as the greatest in the history of the society. To make a similar remark now may appear to our readers like the old cry of "wolf! wolf!" and perhaps little heed will be taken of the statement by those who were absent from the annual meeting. The best of weather greeted the Grand Rapids convention. Members of the Kent County Medical Society were one hundred per cent efficient as entertainers, and this includes also the Kent County Woman's Auxiliary in their entertainment of the wives of visiting physicians.

An innovation this year was the substitution of general sessions for the various sec-

tion sessions. It might be thought that those whose interests are limited to a single specialty would not take in the entire program. This was true, probably, to a certain limited extent. The large hall in the Civic Auditorium, however, appeared comfortably filled with listeners most of the time, and during the last half day, when members usually feel the necessity of getting back to their practices, the hall was filled and practically no one left until five o'clock. There is a feeling among the profession, particularly with the specialist who limits his work to a particular region of the body, that these general sessions present an opportunity to keep up to date in regard to the general field of medicine and surgery.

During the coming months, many of the papers presented will appear in this JOURNAL. Some will not, however, since they were presented as extemporaneous discussions of lantern slide data. We would say that this latter method is an easy matter for speakers, that is, easier than the preparation of a well composed paper, but it is not so valuable to an audience who otherwise look forward to a leisurely perusal of his prepared paper in THE JOURNAL. We would advise, therefore, that in the future meetings, speakers present a summary of their remarks for publication. However, a considerable number, over half, will appear in subsequent numbers of this JOURNAL. The leader in this number of THE JOURNAL is the excellent paper by Dr. Elliott P. Joslin of Boston, Clinical Professor of Medicine, Harvard Medical School, on the subject of "The Diabetic Problem as Influenced by Protamine Insulin."

SOCIALIZED MEDICINE AGAIN

RECENTLY Detroit had a guest speaker in the person of Dr. John A. Kingsbury, at a dinner of the Michigan Conference on social work. According to the summarized newspaper report, Dr. Kingsbury made a statement that only a small minority of our people who are rich and those at least moderately well-to-do can afford to be healthy. Dr. Kingsbury declared that only families earning \$3,000 a year or more could budget individually against sickness, inasmuch as the minimum cost of living per family in the United States was between \$1,400 and \$2,100 a year. According to Dr. Kingsbury, ninety-two per cent of the popu-

lation of Michigan had incomes of \$1,335 for farm families or \$1,916 for families not engaged in agriculture, and he is quoted further as saying, "The time is rotten ripe for a change from the present chaotic system of medical organization to an integrated health program for the nation."

The use of the term "rotten" signifies a certain emotional approach to the subject that hardly warrants a clear unimpassioned discussion. The peculiar thing about this almost wholly onesided presentation of the socialization of medical practice is that little or none of it comes from the people who, it is presumed, would be the beneficiaries of such a scheme. One would think that in this whole wide land, the population at large would be vocal for it and not leave it to a few so-called foundations or self-appointed advocates.

We believe that the vast majority of people in the United States still do not wish to be regimented, but in a sense wish to work out their own destiny. Perhaps this is the reason that socialism has not taken a very deep root in our soil. Many self-appointed advocates of socialization of medicine point to the countries of Europe as their ideals of progressiveness. Distant fields to them look green.

With all the alleged stand-patism in medicine (using the expression of the social reformer), according to Dr. Lester Samuels, superintendent of the Van Wyck Hospital, Jamaica, himself a graduate and fellow of the Royal College of Surgeons of England, America is ten years ahead of Europe in surgery, and he further goes on to say that many post-graduate schools in Europe are merely commercialized propositions and American doctors will do better to stay at home and study at their own excellent medical centers. The socialization of medicine in some European countries has apparently not improved its quality. It would be interesting to know how it is accepted by the citizens of the totalitarian state, were they free to express themselves.

SULFANILAMIDE

THE proprietary elixir of sulfanilamide has, within the past few weeks, achieved a bad reputation, not only in medical but in the lay press as well. A large percentage of patients to whom this elixir has been administered have died from anuria. Efforts have been made to procure any stock in the

hands of distributors in this state to prevent any further untoward mishaps from the administration of the drug. According to tests made by the chemical laboratory of the American Medical Association, the elixir of sulfanilamide appears to be a solution of approximately forty grains of the drug to a fluid ounce of an elixir containing about seventy-two per cent of diethylene glycol together with flavoring. Evidently the combination results in toxicity. The symptoms are given as follows: from twenty-four to forty-eight hours after the administration of the substance, the patient is seized with nausea, vomiting and a general feeling of malaise. This is followed within two to five days by complete anuria. As we go to press, further tests are being made at the laboratory of the American Medical Association for knowledge in regard to the toxic nature of the substance. It is almost needless to say that the cautious physician will refrain from the use of any preparation which has had the reputation of the elixir of sulfanilamide within the past few weeks.

It is such unfortunate instances that show the wisdom of the medical profession through their national association in the establishing of laboratories for the testing out of newly devised combinations in the way of therapeutic agents before employing them in the treatment of patients.

ANTI-VIVISECTION

THE *Manchester Guardian*, one of the highest grade journals of opinion in the English language, has been a weekly visitor to our office for a number of years. On the back cover is a large advertisement calling for support to the National Anti-vivisection Society of England. The anti-vivisectionist appears to have greater influence in England than in this country. The movement which is against animal experimentation is peculiar. The object of animal experimentation is the betterment of life and comfort, not only for human beings, but for the animals themselves. Both medical and veterinary science have been advanced through animal experimentation. It is inconceivable that we should have associated in the same person, namely, the animal experimenter, both cruelty and humanitarianism. Greater incompatibility could scarcely be imagined. The rat and guinea pig, both animals of low sensibility

and mentality, are by far the majority of creatures used for experimentation. One cannot imagine man treating his best friend among the lower animals, the dog, with cruelty. We do not believe it is done to any extent in this country or any other country, or that cutting operations are performed without anesthetics. Yet an anti-vivisection society in this country could embarrass the progress of medical and surgical science, which a member of the Royal College of Surgeons in England said was ten years ahead of anything Europe had to offer.

The humane spirit, together with fine discrimination (by which we mean that every novice should not engage in animal experimentation) will do a lot toward preventing the formation and growth of such an organization in the United States.

* * *

An elaborate brochure on the subject, Alcohol as a Food in Health, in Disease in Old Age, has arrived. In a word, the purpose of the pamphlet is to proclaim to the medical profession the merits, so-called, of alcoholic beverages in the treatment of disease, and so on. Each physician has his own opinion on the subject and the majority are probably correct even though opinions differ. The whole argument about alcohol calls to mind Hamlet's criticism of the player queen, "The lady doth protest too much, methinks." We have never considered alcohol much of a food. However, four reasons have been advanced as to why men drink:

First, convivial friends,
Second, good wine,
Third, because they're dry,
Fourth, any other reason why.

Medical Society Breaks into Print

The Sunday, September 26th *Detroit Free Press* published a sixteen-page supplement prepared by the Wayne County Medical Society. A committee of writers, all members of the society, were requested to write in non-technical language on the progress made in recent years in medicine, surgery and its allied specialties. The result was the *Free Press* supplement containing information on medical subjects for lay consumption. Mr. Lawrence C. Salter of the *Free Press* staff supplied the leavening by editing all the articles and curtailing them when writers showed a disposition to be verbose. We feel that the movement was timely and that it afforded information on subjects of health and medical progress which occupies the foreground of interest among people at large. Advertising matter carried in the supplement was in keeping with the ideals of the profession. In addition to an introductory article by Mr. Salter, Mr. James Bechtel, executive secretary of the Wayne County Medical

Society, contributed a write-up of the history of the society.

The front page contained a glowing tribute to medicine by Mr. Malcolm Bingay. Mr. Bingay has pictured the doctor at his best; he has presented an ideal towards which every member of the profession should aim. We like this sentence in particular, "He sees life from the first feeble cry to the last sigh, and though often he shields himself with a protecting crust of cynicism, deep down in his heart, he walks humbly with God." What better tribute could anyone wish. May we deserve it.

Science and Democracy (*New York Times*)

Science as we know it is the child of democracy. Freedom of thought and of expression is the essence of both—a heritage from the British and French revolutions. That freedom is in peril. In none of the totalitarian States may an authority in any branch of science utter theories that conflict with the views of the ruling dictator on man's place in nature, society or the laboratory. Organized British science is alarmed. But not sufficiently alarmed, in the opinion of Mr. Ritchie Calder, a well-known journalist of London. He addresses an open letter to Lord Rayleigh, president of the British Association for the Advancement of Science, and demands an active coöperative participation of scientists all over the world in solving the problems that confront society.

To most of us science means medicine, and hence better health; observatories, and hence more knowledge about the stars; agricultural experiment stations, and hence better plants and animals; chemical laboratories, and hence compounds that outdo nature's. It stands for much more. Its triumphs are impossible without perfect objectivity, a separation of hopes and desires from the things studied. It is primarily an attitude, perhaps the most important mental acquisition of man. Because of this attitude it is democratic. It knows no creed, no country. It achieves the only true internationality the world has ever known and thereby presents striking evidence that men can sink their differences of opinion and their passions and work for a common cause.

Food for Thought (*Manchester Guardian*)

To keep an open and a lively mind is at least as important a factor in longevity as the keeping of a healthy stomach. Against serious organic trouble there may be no defence. But my observation of life is that people who age quickly (apart from such organic collapse) are those with one-track minds, lacking curiosity and excitement. I recently met a man who looks like fifty-one, eats and drinks like thirty-one, and is, in fact, seventy-one. He has had the fortune to be an intellectual worker and the ability to carry his work on in all sorts of fields of activity. His work has not been too intense, although the results have been prolific. His strength is never to be, for one minute, bored. To have queer and constant and stimulating food for thought is at least as important as to have food for the stomach which has been approved by the entire faculty of medicine—if any such there be.

"My dear, have you met with an affliction?" asked a friend of the widow in weeds.
"Yes, I have lost my husband."
"Was he insured?"
"No, he was a total loss."

President's Page

"HEALTH INFORMATION?—CONSULT YOUR PHYSICIAN"

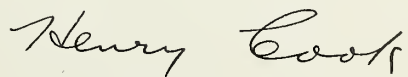
HERE is a project for every County Medical Society, yes, for every individual physician, to undertake this year—immediately. That is, to teach all parts of the population to consult physicians on health matters.

"Know thyself" is a maxim which applies particularly in medicine; there is not a single mortal in this state or country who is not interested in that precious body of his. It therefore is the opportunity, if not the duty and obligation, of each doctor of medicine to bring this message to every individual member of his community: "Mr. Citizen, what do you want to know about *yourself*?"

People must be encouraged to freely ask a physician, especially their family doctor, concerning any phases of preventive and curative medicine. After all, who else is better qualified to give this information to the public?

On the other hand, physicians must find out from the people just what they want, and then by every possible avenue, see that the public is supplied with what it desires. Obtain the people's confidence and give them what they want, and no group need have any fear of revolutionary evolution. Our present day problem is that of getting the ear of the people and of devising ways and means for better and better distribution of the facilities we have to offer. In the past, a large percentage of the people have not been taught to consult physicians, so this is *your* major project today. As the direct result of these consultations, physicians can learn what the people want, and through the county medical societies, put into operation, plans to provide good and sufficient medical care for the entire population, so financed that all groups, especially those persons in the low-income group, will be thoroughly satisfied with the orderly conduct by the physicians themselves, of their own business—that of providing medical service.

Take up this project *now*!



President of the Michigan
State Medical Society



COLLECTION AGENCIES

BY ALLISON E. SKAGGS AND HENRY C. BLACK

IN a previous article we discussed the handling of delinquent accounts, summarizing the technic of collection follow-up in attempting amicable arrangements for settlement. When all such efforts on the part of the doctor have failed to get a response from the debtor it becomes necessary to place the accounts with a collection agency or an attorney specializing in collections to enforce payment. It is in the choice of the collection agency to use that doctors often come to grief, and some discussion of what constitutes a collection agency and the law regarding them would seem to be in order.

Michigan Law requires that any firm, corporation, or person (except attorneys) who accepts or solicits accounts for collection be bonded to the State in the sum of \$5,000.00 as a guarantee of integrity in the handling of money so collected. Every city of fair size has one or more such firms and with few exceptions they are honest and reliable in their dealings. Many agencies keep clients' funds in a separate trust account, remit together with a statement the first of every month, require no documentary signature on account lists, charge a fair commission, and give good service year after year. Such agencies deserve the doctors' business and are not to be confused in any way with those unscrupulous organizations with one of which most doctors have had unpleasant experience.

The head of a prominent collection agency said the other day, "Tell the doctors if some one wants them to sign something in order to have their accounts collected, to look out." He was referring to "trick" contracts which have been featured by certain large corporations usually centered in a large and distant city and which have been in the habit of soliciting business particularly with doctors and with invariably bad results. Not only do the doctors fail to get checks for money collected, but the rough-shod methods used in many cases seriously damage their practice. Some of these very agencies have posted their bond as the law requires, but the fine print in the wording of

their contracts is so designed as to make their operation within the law, and once the doctor has listed the accounts and signed the contract there is nothing he can do about it. These firms frequently employ a local man with a good circle of acquaintances as solicitor, and are thus able to get accounts from many of his friends before he finds out that the firm's methods are questionable.

It is a common occurrence for some doctors to allow a worthy but needy patient to work out an account by collecting some old accounts. Sometimes good results are obtained, but often the arrangement becomes unsatisfactory because of the inexperience of the amateur collector and his more or less slipshod methods of handling money collected. The fact that he is not bonded, has no access to change of address files, and feels the job is only temporary anyway, often leads eventually to an unsatisfactory conclusion of the arrangement.

In summarizing these comments on collection agencies, let us say that it is usually well to be guided by the following suggestions:

1. Whenever possible, place your accounts with a local agency.
2. No matter what the recommendations, do not sign collection contracts unless you thoroughly understand them, usually they are unnecessary.
3. Use only regular bonded collectors; their experience is valuable.

Serum Carotene in Diabetic Patients with Clinical Evidence of Carotenemia as Determined by Photo-electric Colorimeter

George H. Stueck, Gerald Flaum and Elaine P. Ralli, New York (*Journal A. M. A.*, July 31, 1937), determined the serum carotene in thirteen diabetic patients with clinical evidence of carotenemia (pigmentation of the palms of the hands, soles of the feet or subconjunctival fat). The blood was taken three hours after the breakfast meal. The extraction of the serum was carried out as described by White and Gordon with 5 c.c. of serum. The serum carotene was above the normal in all the patients. The average serum carotene for the group was 0.392 mg., which was higher than in the previously reported group of diabetic patients. The higher level of serum carotene is consistent with the appearance of clinical carotenemia. The photo-electric colorimeter is a convenient and accurate method for the determination of carotene.

DEPARTMENT OF SOCIETY ACTIVITY

L. FERNALD FOSTER, M.D., Secretary

Council Chairman's

- - - Communication

BY-LAWS

THE honor of being president of the Michigan State Medical Society is bestowed on a member for his scientific contributions but especially for his past achievements for organized medicine. The By-laws formerly required him to continue these strenuous duties of reorganized medicine by visiting each county society once a year. This By-law was repealed at the recent meeting of the House of Delegates. This required other changes in the By-laws so the program of the Michigan State Medical Society should continue.

These By-laws affect the Councilor. His duties are broadened so that he becomes a General in his district. He is the organizer and peacemaker. He is given a free hand to organize and stimulate county societies. He must create friendship and good feeling among members. He is required to visit each county medical society, in his district, twice a year.

This cannot be done unless the county societies coöperate by putting their Councilor on their mailing list and seeing that he attends their meetings. They should hold regional meetings several times a year where the Councilor and regional member of the Public Relations Committee can explain to them the needs of organized medicine.

Help your Councilor so that his yearly report at the mid-winter meeting of the Council in January shall merit the proper award.

Your Councilor holds one of the most important offices in the Michigan State Medical Society. He is giving his time in your cause. Give him the response he desires and his labors shall not go unheralded.

Study the By-laws of the Michigan State Medical Society.

PAUL R. URMSTON, M.D.
Chairman of the Council

AN APPRECIATION

THE 1937 Annual Session is now a matter of history. With its passing, we record the reactions of all those who planned and participated in its deliberations and programs.

From the notable array of speakers who graced the scientific program we elicit an appreciation of the fine attendance and the courteous attention accorded them. From the officers of the State Society we hear expressions of appreciation of the prompt and consistent attendance of the members of the House of Delegates at the sessions of that body. From our Technical Exhibitors come the enthusiastic testimonials of gratitude for the splendid consideration given them by the attending physicians during the convention.

The large attentive audiences at the Scientific Sessions inspired the essayists to perfect the educational phase of the annual meeting.

The deliberations of the House of Delegates were carried out with a smoothness and dispatch which were a credit to the more than one hundred members of that body. The delegates took their task seriously and executed their deliberations with an attitude which indicated a detailed study of the questions before them.

For months a plea went forth to the members of the Society to visit and register at each exhibitor's booth. The response to these pleas was most gratifying and as a result much of value accrued to both the exhibitor and the physician—it developed good-will and friends.

At an annual session where so many innovations were inaugurated the expressions of appreciation so spontaneously made by all those who had any part in its development and execution are most significant. These appreciations are made sincerely to the twelve hundred members of the Michigan State Medical Society who attended the annual meeting. They testify to the interest of the physicians of Michigan in scientific medicine and all the other phases of organized medicine.

We thank you all and urge your continued interest in your State Society.

ANNUAL MEETING OF THE COUNCIL

September 26, 27, 28, 1937

HIGHLIGHTS:

1. Approval of \$500,000 Postgraduate Endowment Fund of Michigan State Medical Society.
2. Approval of Certificates for Postgraduate Work done by Michigan physicians.
3. Annual Convention set for Detroit, September 19, 20, 21, 22, 1938.
4. Executive Committee of The Council elected: Dr. P. R. Urmston, Chairman; Dr. Vernor M. Moore, Vice Chairman; Dr. A. S. Brunk, Chairman of Publications Committee; Dr. H. R. Carstens, Chairman of Finance Committee; Dr. I. W. Greene, Chairman of Publications Committee.
5. President Henry Cook's Committees for 1937-38 approved (126 members on M.S.M.S. Committees).
6. Teachers' Certificates to be presented physicians who give Social Hygiene Courses in Public Schools.
7. Copies of all medical bills, introduced into the State Legislature, to be sent to county medical societies.
8. The Council recommends to the House of Delegates that the dues be slightly increased, to retain position of Michigan State Medical Society.
9. Question of institutional practice by osteopaths is basis for judicial determination in Flint case, October 20.

First Session of the Council

1. *Roll Call*.—The Annual Meeting of The Council was called to order by Dr. P. R. Urmston, Chairman, at 8:27 p. m., in the Cascade Hills Country Club, Grand Rapids. Those present were: Drs. P. R. Urmston, F. T. Andrews, F. C. Bandy, Wm. E. Barstow, A. S. Brunk, H. R. Carstens, H. H. Cummings, I. W. Greene, Wilfrid Haughey, T. F. Heavnerich, Roy H. Holmes, Harlen MacMullen, W. A. Manthei, J. Earl McIntyre, V. M. Moore, F. E. Reeder, B. H. VanLeuven, also President-Elect Henry Cook, Secretary L. Fernald Foster, Treasurer Wm. A. Hyland, L. W. Shaffer, A. V. Wenger, L. G. Christian, P. A. Riley, R. H. Pino, and Executive Secretary Wm. J. Burns. Absent: Councilor F. A. Baker.

2. *Council Duties*.—The Chair announced that he would appoint Drs. Greene, Andrews and Holmes as a Committee of The Council to study the various duties of The Council and see if it is doing sufficient work or too much; he requested the committee to report if possible at the next meeting of the Executive Committee.

3. *Minutes*.—The minutes of the meeting of The Council, August 11, 1937, were read and approved.

4. *Financial Report*.—The Financial Report was presented and discussed at length. The Executive Secretary was requested to present a breakdown of the current items into "General account," "Joint Committee account," and "Certificates of Deposit account."

Treasurer Hyland gave a report on the bond transactions of the year, and presented a list of the bond holdings of the MSMS and of the Medico-Legal Fund.

Bills Payable for the month were presented, studied, and approved, with a motion to pay same, by Dr. Andrews, supported by several. Carried unanimously.

5. *Medical Economics*.—Dr. Pino, Chairman of the Medical Economics Committee, suggested to The Council the possibility of changing the name of this committee to "Committee on Distribution of Medical Care." Motion of Dr. Carstens, supported by several, that The Council concurs in the suggested change of name of this particular committee, and

recommends consideration of this change by the House of Delegates. Carried unanimously.

The present efforts for a referendum on the Welfare Laws were discussed by Drs. Pino, Greene, Christian, et al.

The Council discussed the problem of medical care to old age pensioners, which is intimately tied up with the possible referendum on the Welfare Laws. It also discussed the Afflicted Child problem.

Dr. Pino was thanked for his presence and report.

6. *Syphilis Control*.—Dr. L. W. Shaffer, Chairman of the Committee on Syphilis Control, presented his report on recent activity, which was discussed by Drs. Holmes, Foster, McIntyre and Christian and others. It was recommended that Dr. Shaffer present his findings to the House of Delegates, especially with reference to the Prenuptial Physical Examination law.

7. *Contact with Parole Commission*.—Dr. Philip A. Riley, Chairman of the Contact Committee with Parole Commission, reported on the meeting with the Parole Commission and officials of the Corrections Department. The subject was further discussed by Drs. Foster, Cummings and others, and The Council referred the matter to Secretary Foster, to take up with the proper committee, and to report back to the Executive Committee of The Council at the proper time.

8. *Medico-Legal*.—Dr. E. F. Sladek reported on the Smiseth case, which was discussed generally by members of The Council. Motion of Dr. Reeder, seconded by several, that the problem be referred back to the Medico-Legal Committee for a legal opinion. Carried unanimously.

9. *Supplementary Report of The Council*.—The supplementary paragraphs in the Annual Report of The Council, as presented by Chairman Urmston, were read by Secretary Foster. Motion of Drs. Andrews-McIntyre that this Supplementary Report be incorporated in the Annual Report of The Council. Carried unanimously.

10. *Postgraduate Medical Education*.—Dr. Cummings presented a supplementary report of the Annual Report of the Committee on Postgraduate Medical Education. The Council recommended that Dr. Cummings present this supplemental report to the House of Delegates.

11. *Institutional Practice by Osteopaths*.—Dr.

Cook reported on the Hurley Hospital case: that the committee had selected Earl W. Murshaw of Grand Rapids as attorney in behalf of the MSMS, which is now a party-defendant in the case of Kesten v. Board of Hospital Managers for the City of Flint.

12. *Berrien County Problem.*—Councilor Andrews reported that Dr. W. C. Ellet of Benton Harbor wished to present concrete evidence to the Council on this problem.

13. *Attendance of Probationary Members at Annual Meeting.*—Dr. Andrews explained that in Kalamazoo some physicians who have applied for membership but who are kept on probation for one year, desire to attend the MSMS scientific sessions in Grand Rapids. Motion of Drs. Cummings-McIntyre that all bona-fide doctors of medicine who are serving as internes, residents, probationary or associate members of a county medical society be invited to attend the annual sessions of the MSMS. Carried unanimously. It was understood that all such doctors of medicine shall be certified and vouched for by the councilor or the president or the secretary of the county medical society.

14. *Cancer Committee.*—The request of the Cancer Committee that the expense of a dinner for its members, to be held in Grand Rapids, be paid by the MSMS, was discussed. It was felt this was a bad precedent, as other committees of the MSMS held meetings at the time of the Annual Meeting, and if the expense for one committee was to be paid, then all committees could request the same privilege. Motion of Drs. Heavenrich-Bandy that this problem be explained by the Executive Secretary to the Chairman of the Cancer Committee. Carried unanimously.

15. *Meetings in Detroit.*—The question as to whether the A.M.A. should be invited to hold its 1939 Annual Meeting in Detroit—whether the American Congress of Physical Therapy should be invited to hold its 1938 meeting in Detroit—whether the American College of Surgeons should be invited to hold its 1938 meeting in Detroit—all were referred to the House of Delegates.

16. *Resolution to President H. E. Perry.*—The absence of Dr. Perry was regretfully noted, and motion of Dr. McIntyre, seconded by several, that a resolution be conveyed to President Perry via telegram was unanimously carried.

A telegram of congratulations to Dr. George Kamperman, on his honor bestowed by the University of Michigan, was ordered dispatched.

17. *Dr. Baker Resigns.*—The Chair read a letter from Dr. F. A. Baker of Pontiac, Councilor of the 15th District until 1940, in which he resigned, due to the pressure of work. Motion of Drs. Andrews-McIntyre that the Council accept this resignation with deep regret, and feels sorry that the valued services of Councilor Baker on behalf of the MSMS cannot be continued. Carried unanimously.

18. *Courses in Social Hygiene.*—Secretary Foster read a letter from Dr. Eugene B. Elliott, of the State Department of Public Instruction, relative to the status of physicians who give courses in public schools in Social Hygiene, in accordance with the law passed by the 1937 Legislature.

19. *Press Committee of the House of Delegates.*—Speaker Reeder reported on the personnel of his Press Committee for the House of Delegates at the 1937 session, and asked advice as to whether they should be instructed in open meeting. The Council felt that the instructions to the Press Committee should be in open meeting at the House of Delegates.

20. *Copies of Medical Bills Introduced Into The Legislature.*—Dr. Carstens discussed the advisability of sending copies of all medical bills as introduced into the legislature to the secretaries of county medi-

cal societies—said copies to be sent by the Executive Office of the MSMS. Motion of Drs. Carstens-Heavenrich that this service be put into effect. Carried unanimously.

21. *Adjournment.*—Motion of Drs. Holmes-Greene that the Council adjourn. Carried unanimously. The Council adjourned at 12:23 A. M.

Second Session of the Council

1. *Roll Call.*—The meeting was called to order by Chairman P. R. Urmston in the Pantlind Hotel, Grand Rapids, at 7:00 p. m. Those present were: Drs. P. R. Urmston, F. T. Andrews, F. C. Bandy, Wm. E. Barstow, A. S. Brunk, H. R. Carstens, H. H. Cummings, I. W. Greene, Wilfrid Haughey, T. H. Heavenrich, R. H. Holmes, Harlen MacMullen, W. A. Manthei, J. E. McIntyre, V. M. Moore, F. E. Reeder, B. H. VanLeuven. Also Drs. Henry Cook, L. Fernald Foster, Wm. A. Hyland, P. A. Riley, Wm. J. Stapleton, Jr., A. V. Wenger, and Executive Secretary Wm. J. Burns.

2. *Postgraduate Endowment Fund.*—Dr. Cummings reported on the proposed postgraduate endowment fund of the Michigan State Medical Society—a fund of \$500,000 to be raised in five years, one-fourth of which would be assumed personally by Dr. J. D. Bruce, Vice President of the University of Michigan, Ann Arbor. Dr. Cummings stated that the physicians of the state should become interest men of wealth to leave money to this postgraduate fund. The matter was discussed by the Council, and referred to the House of Delegates.

The Council also suggested that Dr. Cummings explain to the House of Delegates the certificates for postgraduate work which are to be given in the future.

3. *Dues.*—In connection with the increased activities of the MSMS, the Council studied the matter of the necessity of a raise in dues. Motion of Drs. Holmes-McIntyre that The Council recommend to the House of Delegates that the annual dues be raised to \$2.00. The motion was carried. The matter was referred to the House of Delegates.

4. *Medico-Legal.*—Dr. Stapleton, Secretary of the Medico-Legal Committee, discussed the Smiseth case.

Motion of Drs. Carstens-McIntyre that the Executive Secretary of the MSMS be directed to ask the Secretary of the Medico-Legal fund regarding the exact dates, also to give Dr. Smiseth's full dues record, and also other pertinent facts and refer to the Executive Committee at a future meeting, and also to obtain a legal opinion from these facts. Carried unanimously.

5. *Investigators for Board of Health.*—The question as to whether the Health Commissioner of the State should be asked to use Social Security Funds, as is done in other states, to help eliminate quackery in Michigan, especially in rural areas, was discussed by The Council. President-Elect Cook and J. Earl McIntyre, Secretary of the State Board of Registration in Medicine, presented their views.

6. *Social Hygiene Courses.*—On motion of Dr. Brunk, seconded by several, a vote of thanks was placed on the records to Dr. Robt. S. Breakey and Dr. Harold A. Miller of Lansing for their help to the MSMS and the county medical societies in the preparation of outlines of lecture courses in Social Hygiene for presentation in public schools. Carried unanimously.

7. *Adjournment.*—Meeting was adjourned at 7:45 p. m., on motion of Drs. Holmes-Cummings. Carried unanimously. The Chair called the next meeting of The Council for Sept. 28 at 8:00 a. m. (breakfast).

Third Session of the Council

1. *Roll Call.*—The meeting was called to order by Chairman P. R. Urmston at 8:30 a. m. in the Pantlind Hotel. Those present were: Drs. P. R. Urmston, F. T. Andrews, F. C. Bandy, W. E. Barstow, A. S. Brunk, H. R. Carstens, H. H. Cummings, J. W. Greene, Wilfrid Haughey, T. F. Heavenrich, R. H. Holmes, V. M. Moore, F. E. Reeder, E. F. Sladek, B. H. VanLeuven, Henry Cook, L. Fernald Foster, Wm. A. Hyland, and Executive Secretary Wm. J. Burns.

Absent: Drs. Harlen MacMullen, W. A. Manthci, J. E. McIntyre.

2. *Committees for 1937-38.*—President Cook presented his appointments to the committees of the MSMS for 1937-38, which were discussed. Motion of Drs. Heavenrich-Cummings that the appointments as made be endorsed by The Council. Carried unanimously.

3. *Reorganization of The Council.*—(a) Dr. P. R. Urmston was reelected as Chairman of The Council on nomination of Drs. Greene and Brunk, with motion of Drs. Heavenrich-Barstow that the nominations be closed and the Secretary be instructed to cast the unanimous ballot for Dr. Urmston.

(b) Dr. Carstens was nominated as Vice Chairman of The Council, by Drs. Andrews and Greene; Dr. Carstens withdrew.

Dr. Heavenrich was nominated as Vice Chairman, by Drs. Carstens-Haughey; Dr. Heavenrich also withdrew.

Dr. V. M. Moore was nominated as Vice Chairman, by Drs. Holmes-Heavenrich; motion of Drs. Heavenrich-Cummings that the nominations be closed and that the Secretary be instructed to cast the unanimous ballot for Dr. Moore as Vice Chairman of The Council. Carried unanimously.

(c) Dr. Carstens was nominated as Chairman of the Finance Committee by Drs. Holmes-VanLeuven, who made the motion that the nominations be closed and that the Secretary be instructed to cast the unanimous ballot for Dr. Carstens. Carried unanimously.

(d) Dr. Greene was nominated as Chairman of the County Societies Committee by Drs. Barstow-Brunk, who made the motion that the nominations be closed and the Secretary be instructed to cast the unanimous ballot for Dr. Greene as Chairman of the County Societies Committee. Carried unanimously.

(e) Dr. Brunk was nominated as Chairman of the Publications Committee by Drs. Bandy-Carstens. Motion that the nominations be closed and the Secretary be instructed to cast the unanimous ballot for Dr. Brunk as Chairman of the Publications Committee. Carried unanimously.

4. *Place and Time of Annual Meeting, 1938.*—This matter was discussed and on motion of Drs. Carstens-Riley was referred to the Executive Committee of The Council. Carried unanimously.

5. *Investigator for Board of Registration in Medicine.*—This matter was discussed by the Council and on motion of Drs. Carstens-Haughey was referred to the Contact Committee to Governmental Agencies. Carried unanimously.

6. *Nursing School Situation.*—This problem was discussed by the Council, and on motion of Drs. Carstens-Holmes the President was empowered to contact Nurses' Association so it could make a study, and to present recommendations at the next meeting of the Executive Committee of The Council. Carried unanimously.

7. *Vote of Thanks.*—A vote of thanks was expressed by The Council to all speakers on the pro-

gram of the Annual Meeting in Grand Rapids, to the Kent County Medical Society as host, to the Local Committee on Arrangements, the Grand Rapids Chamber of Commerce, the Press Committee and newspapermen and to all who in any way helped make a success of the 72nd Annual Convention.

8. *Adjournment.*—The meeting was adjourned at 10:40 a. m. The chair thanked all.

COUNTY SOCIETIES

BAY COUNTY

A. L. ZILIAK, M.D.
Secretary

On Thursday evening, October 7, Dr. Morris Fishbein, Editor of the *Journal of the American Medical Association*, addressed a public dinner meeting at the Wenonah Hotel, Bay City. Dr. Fishbein took for his subject "Changes in our Social Trends." Over three hundred attended the meeting which was sponsored by the Woman's Auxiliary of the Bay County Medical Society.

Dr. Fishbein traced the changes in our social order since 1890, showing the advances made along medical lines and the resulting increase in the costs of medical care, particularly those due to the necessary and more elaborate tests and the more expensive appurtenances to the modern practise of medicine. He compared the costs of complete medical services to those of luxuries and other necessities of life.

In addition to the local Auxiliary of which Mrs. A. L. Ziliak is president, Mrs. A. V. Wenger, immediate past-president of the State Auxiliary, Mrs. G. C. Hicks, state president and Mrs. Carl Snapp, past treasurer were present. Mrs. L. C. Harvie, president of the Saginaw Auxiliary, and Mrs. F. L. Morris, president of the Tuscola Auxiliary, were also present.

Dr. A. D. Allen, president of the Bay County Medical Society and Dr. L. C. Harvie, president of the Saginaw County Medical Society, together with Dr. L. Fernald Foster, secretary of the Michigan State Medical Society and Dr. P. R. Urmston, chairman of the Council, were present. The meeting was opened by Mrs. A. D. Allen, vice-president of the Bay County Auxiliary.

GOGEBIC COUNTY

F. L. S. REYNOLDS, M.D.
Secretary

The Officers of the Michigan State Medical Society were guests of honor at a "State Society Night" held in Ironwood on August 23, 1937. Dr. C. C. Urquhart, president, welcomed the guests and turned the meeting over to Dr. Henry E. Perry of Newberry, president of the State Society.

Dr. Louis J. Hirschman of Detroit, past president of the Michigan State Medical Society, outlined the "Activities of the American Medical Association." Dr. Roy H. Holmes of Muskegon, counselor of the Eleventh District, discussed the Afflicted and Crippled Child laws. Wm. J. Burns, Lansing, executive secretary of the State Society, spoke of recent "Legislative Activity." Dr. L. Fernald Foster, Bay City, secretary of the Michigan State Medical Society, discussed "Organization, and the State Society Annual Meeting."

Among those present were Drs. M. A. Gertz,

COUNTY SOCIETIES

D. C. Pierpont, D. C. Eisele, H. L. Sarvela, T. S. Crosby, C. C. Urquhart, W. E. Tew, and F. L. S. Reynolds.

INGHAM COUNTY MEDICAL SOCIETY

R. J. HIMMELBERGER, M.D.
Secretary

The Ingham County Medical Society resumed activity after a two months vacation by meeting at the Elks Home in Lansing on September 21, 1937. There were eighty-nine members and seven guests present at dinner.

Following the dinner and preceding the business meeting, Dr. C. S. Davenport showed the movies taken at the 1934, 1935, 1937, Stag Day parties staged by the Society.

Following the movies, Dr. Milton Shaw, president, called the meeting to order.

The minutes of the last meeting were approved as printed in the BULLETIN. During the business meeting, Dr. Lawrence Drolett was elected to active membership and Dr. Freeman Harrold to associate membership.

The president drew the Society's attention to the weekly postgraduate clinics being held in Lansing and Jackson and to the Annual Meeting of the State Society in Grand Rapids the last week in September.

It was announced that Dr. A. M. Campbell was a patient at Mayo Clinic.

The society went on record as backing Dr. Leo Christian for delegate to the American Medical Association and instructed the delegates to work for his election.

The delegates were also instructed to notify the House of Delegates that this society was willing to cooperate with the State Society in its Venereal Disease Control Program.

Following the business meeting the president introduced Dr. Fred Drolett of Lansing who read a paper on "Economic Problems."

The paper was very timely and provoked much discussion which continued long into the night.

IONIA-MONTCALM COUNTY MEDICAL SOCIETY

JOHN J. MCCANN, M.D.
Secretary

The Ionia-Montcalm County Medical Society was host to the officers of the Michigan State Medical Society at a "State Society Night" held in Ionia on Tuesday evening, October 12. Dr. L. E. Kelsey, president, called the meeting to order following dinner which was served in the Reed Inn. After a brief business session, Dr. Kelsey turned the meeting over to Dr. Vernor M. Moore of Grand Rapids, counselor of the Fifth District, who acted as toastmaster.

Dr. Moore called upon Dr. Henry Cook of Flint, new president of the State Society. Dr. Cook spoke on "The Program of the Michigan State Medical Society."

Dr. P. R. Urmston of Bay City, chairman of The Council, spoke on the "Functions of The Council."

Councilors F. T. Andrews of Kalamazoo, representing the Fourth District, and W. E. Barstow of St. Louis, representing the Eighth District, were introduced by Dr. Moore.

Wm. J. Burns, executive secretary of the State Society, was called upon for a few remarks. Mr. Burns spoke briefly on "The Making of Laws."

Special guests of honor were Senator D. Hale Brake of Stanton and Representative M. Clyde Stout of Ionia. Both Senator Brake and Representative Stout were called upon and each responded with a brief talk.

Dr. L. Fernald Foster, Bay City, secretary of the State Society, discussed "Organization and Integration."

Approximately fifty members and guests were present.

ST. CLAIR COUNTY

GEORGE M. KESL, M.D.
Secretary

The regular meeting of the St. Clair County Medical Society was held Tuesday, October 5, 1937, at Port Huron Hospital. Supper was served to twenty-two members and guests. An additional number of members attended the meeting afterwards. The guest speaker of the evening was Dr. T. J. Heldt, Physician in Charge, Department of Neuropsychiatry of the Henry Ford Hospital, Detroit.

President-elect C. A. Macpherson of Saint Clair was in the chair in the absence of president Howard O. Brush who is abroad engaged in postgraduate work. The minutes of the special meeting of September 24, 1937, were read and approved as read. The Chair called the attention of all members present who had not attended the special meeting to a certain motion adopted at that meeting. Dr. Macpherson asked that all such members voice their approval and give heed to the matter. Dr. A. L. Callery, delegate to the State Society, gave a brief but comprehensive account of the annual meeting at Grand Rapids, touching upon those points of interest and importance to the rank and file of the profession. Dr. Heavenrich announced a dinner to honor Dr. Handy of the Tuscola County Society to be held at Caro on October 7, 1937, and urged any members of the medical profession who possibly could to attend the meeting.

The Chair asked Dr. D. J. McColl to introduce Dr. Heldt, who addressed the Society upon the subject, "Sedative Drugs and Their Pitfalls". The speaker stressed the need on the part of the physician to select sedatives with care, selecting those of low toxicity and those whose sedative or hypnotic effect became readily discernible. He pleaded for the use of the personality of the physician who had the confidence of the patient. He spoke with favor of barbital, phenobarbital and sedormid as well as any of the sedatives containing the allyl or carbamide radicals and urged caution with nembutal and allonal. The speaker urged caution in the use of morphin. After a discussion a rising vote of thanks was tendered Dr. Heldt.

Giving the Tooth a Rest: Faith Curist: "Pre-tend that you have no toothache. Persuade yourself that it is all imagination, suggested by an evil power. Say: 'Get thee behind me!'"

Patient: "What, and turn it into lumbago?"

—*Calgary Herald.*

Mrs. Robert Katz telephoned her husband that she would call for him at the office. Not finding him there, she looked in at the barber's shop on the floor beneath.

"Bob Katz here?" she asked.

"No, madam," replied the indignant barber. "We certainly do not bob cats here."

WOMAN'S AUXILIARY

OFFICERS OF WOMAN'S AUXILIARY TO MICHIGAN STATE MEDICAL SOCIETY

1937-1938

President, Mrs. G. C. Hicks
1009 Wildwood Avenue, Jackson, Mich.

President-Elect, Mrs. P. R. Urmston
1862 McKinley Avenue, Bay City, Mich.

Vice President, Mrs. L. G. Christian
606 Townsend Street, Lansing, Mich.

Secretary-Treasurer, Mrs. J. W. Page
119 N. Wisner Street, Jackson, Mich.

Past President, Mrs. A. V. Wenger
132 Grand Avenue, Grand Rapids, Mich.

Honorary President, Mrs. Guy L. Kiefer
148 E. Grand River Avenue, East Lansing, Michigan.

Standing Committees

Mrs. Robert Jeanichen, Program
906 Howard Street, Saginaw, Mich.

Mrs. A. L. Ziliak, Public Relations
200 Lincoln Avenue, Bay City, Mich.

Mrs. Henry J. Pyle, Organization
525 Morris Avenue, S. E., Grand Rapids, Mich.

Mrs. C. B. Fulkerson, Press
1535 Grand Avenue, Kalamazoo, Mich.

Mrs. L. G. Christian, Legislation
606 Townsend Street, Lansing, Michigan

Mrs. Ledru Geib, Revision
1411 Benshire Road, Grosse Point Park, Mich.

Mrs. L. R. Keagle, Hygeia
41 Garrison, Battle Creek, Mich.

Mrs. J. Earl McIntyre, Historian
600 Grand Avenue, Lansing, Mich.

Mrs. Elmer L. Whitney, Parliamentarian
18224 Wildemere, Detroit, Mich.

Advisory Council

Harrison S. Collisi, M.D., Chairman
148 Monroe Avenue N. W., Grand Rapids, Mich.

Florence Ames, M.D.
119 S. Monroe Street, Monroe, Mich.

Claire L. Straith, M.D.
1553 Woodward Avenue, Detroit, Mich.

Harold W. Wiley, M.D.
300 W. Ottawa, Lansing, Mich.

Gordon H. Yeo, M.D.
Big Rapids, Mich.

County Presidents

Bay County, Mrs. A. L. Ziliak
200 Lincoln Avenue, Bay City, Mich.

Calhoun County, Mrs. W. Leonard Howard
American Legion Hospital, Battle Creek, Mich.

Eaton County, Mrs. T. Wilensky
Eaton Rapids, Mich.

Ingham County, Mrs. T. P. Vanderzalm
113 S. Jennison, Lansing, Mich.

Jackson County, Mrs. John Ludwick
1010 W. Washington Street, Jackson, Mich.

Kalamazoo County, Mrs. W. W. Lang
218 Woodward Avenue, Kalamazoo, Mich.

Kent County, Mrs. Carl Snapp
980 Plymouth Road, Grand Rapids, Mich.

Oakland County, Mrs. Frank Gerls
536 N. Huron Street, Pontiac, Mich.

Ottawa County, Mrs. Ralph Ten Have
Sheldon Road, Grand Haven, Mich.

Saginaw County, Mrs. Lloyd Harvie
417 Ardussi Avenue, Saginaw, Mich.

Tuscola County, Mrs. F. L. Morris
Cass City, Mich.

Wayne County, Mrs. Roger V. Walker
1050 Parker, Detroit, Mich.

Monroe County, Mrs. Albert Reisig
609 Borgess Avenue, Monroe, Mich.



MRS. G. C. HICKS
President, Woman's Auxiliary to the
Michigan State Medical Society

PRESIDENT'S GREETING

IT IS WITH pleasure that I greet you at this time. I accepted the responsibilities of this office with the firm intention of carrying on its duties to the best of my ability. I am convinced that the co-

operation of the officers, standing committees, county presidents and the entire membership will be outstanding, making it possible to carry on a program comparable to that of our predecessors. I have had the pleasure of discussing auxiliary affairs with all the board members, and we will go forward with the true conviction that we will create a better fellowship among auxiliary members. If we accomplish this we cannot help influence the various societies for better. I am sure I bespeak all the leaders when I say our social program cannot be too extensive, but let it be educational also. In carrying out the educational part of the program, let us be ever mindful that we are an auxiliary presenting subjects pertinent to the purpose of our organization, and ever alert to the dictations of our parent body, the Medical Society as we extend our work beyond our own organization.

The profession of medicine is at the most critical period of its history. Dr. Morris Fishbein spoke at an open meeting sponsored by the Auxiliary to the Bay County Medical Society stating no nation ever had a revolution when the people were supplied with food, fuel, clothing, medical and dental care. These are the necessities of life. In tracing the progress of medicine from 1890 to the present day with staggering statistics, he stated further that the American people are not dissatisfied with medical treatment as given today. They are not desirous of a change until a better system is presented, and certainly "socialized medicine" is not the solution. The American people must be taught that the cost of medical care should be comparable to other expenses. America has the lowest death rate in the world. Indigent care in America surpasses that of any nation.

"Citadel," by Archibald Joseph Kronin and "Man

JOUR. M.S.M.S.

Breed and Destiny," by Clifford Cook Furnas are recommended for book reviews by Dr. Fishbein.

I urge each County President to secure for her use the "Handbook for Auxiliaries" which is printed by the Auxiliary of the American Medical Association. Send forty cents (40c) to cover cost of printing to Mrs. E. D. Lamb, Klamath Falls, Oregon. "The News Letter" is published quarterly and contains reports and other valuable information sent in by the Auxiliaries of the thirty-eight states which are organized. Send your subscription to Mrs. J. P. Simonds, 25 E. Walton Place, Chicago, Illinois, with one dollar (\$1.00).

As we begin the twelfth year of our existence, we can be proud of our membership of seven hundred ten doctors' wives. Two hundred seven registered at the Convention. From the National President, Mrs. Keck, comes an urge to work diligently to increase our membership. May our goal be one thousand members, which would mean an increase of some twenty odd for each of the thirteen auxiliaries.

We were far from meeting our quota of *Hygieia* subscriptions. As it is our greatest health educator, let us use every effort to place it in centers where it will meet every need.

Help meet the requests of the Press Chairman by getting your publicity to her before the seventeenth of each month. Dr. Dempster, Editor, advised "Don't sleep on it," i.e., write your notes for THE JOURNAL before you sleep on the day of your County Meeting.

Mrs. Henry J. Pyle, Organization Chairman, will be glad to hear from any group who wishes to complete organization.

Mrs. Robert Jeanichen, Program Chairman, has on hand much material for program building. She will be glad to give you information.

Keep your Scrap Books up to date and bring them to the Convention, which is to be held in Detroit next September.

A committee on Necrology with Mrs. J. H. Dempster, 5761 Stanton Avenue, Detroit, Michigan, as Chairman, and Mrs. F. T. Andrews, 2325 Crane Avenue, Kalamazoo, Michigan, has been appointed. Send obituary notices to the committee to be printed in THE JOURNAL.

MRS. G. C. HICKS, *President*.

Saginaw County

Plans for the year's program were discussed Tuesday evening at the meeting of the Saginaw County Medical Auxiliary at the home of Mrs. B. H. Beckwith, 421 South Washington Ave., Saginaw.

Committee chairmen were named by Mrs. Lloyd C. Harvie, president, as follows: Program, Mrs. Oliver W. Lohr; membership, Mrs. Robt. F. Jaenichen; legislation, Mrs. Lloyd Campbell; *Hygieia*, Mrs. J. A. McLandress; telephone, Mrs. Edwin MacKinnon; entertainment, Mrs. Dale E. Thomas, Mrs. Gunther Tiedke; flowers, Mrs. David E. Bagshaw; public relations, Mrs. A. Raymond Moon; publicity, Mrs. Arthur E. Leitch; parliamentarian, Mrs. John W. Hutchinson. A report on the state meeting held in Grand Rapids was given by Mrs. Jaenichen.

After the business session the group sewed on articles for the Children's Home.

Refreshments were served from a table centered with fall flowers. Mrs. Henry J. Meyer presided. Also assisting Mrs. Beckwith were Mrs. Donald C. Durman, Mrs. Frank O. Novy, Mrs. Victor C. Hill, Mrs. Wm. K. Anderson, Mrs. Thomas, and Mrs. Tiedke. The house prizes were won by Mrs. McLandress and Mrs. Herbert O. Helmkamp.

The next meeting will be November 16, with Mrs. Clemens Kirkgeorge, Frankenmuth.

CORRESPONDENCE

IS MEDICINE HOMEWARD BOUND?

To the Editor:

The physicians who attended the State Medical Society meeting at Grand Rapids and listened to the addresses of the speakers from outside the state, excepting those connected with the State and Federal Services, could notice that there was a tendency towards recognition of the Art of Medicine and believing that the art had a firm place in the practice of medicine.

This was particularly stressed by the president of the Pennsylvania State Medical Society, Dr. Maxwell J. Lick, that the general practitioner could not be successfully disposed of, as the specialist did not come in contact with the ordinary patient and that if it were not for the general practitioner, patients needing special care would go directly to the institution or public clinic and not to the independent specialist.

That the Art of Medicine plays an important part in the treatment of disease, and that science comes in secondarily, is shown by the large number of people who consult the osteopath and the chiropractor who have more art than science.

This is also demonstrated by the large number of persons who are firm believers in Christian Science. Again there is displayed the art of healing with practically no science.

State Medicine (so-called) is administered scientifically and does not recognize the Art of Medicine which plays a large part in the psychology of those who believe themselves to be ill—and a large proportion of the patients who consult the medical profession must be treated psychologically. This, the state and institution will not recognize, therefore, there will be a return of many patients to the physician.

ANGUS McLEAN.

Detroit, Nov. 1, 1937.

A gossip is a person who talks to you about others;

A bore is one who talks to you about himself;

A brilliant conversationalist is one who talks to you about yourself.

* * *

The amateur calls it a "chance shot" when he hits what he's aiming at.

* * *

When you cannot please everybody it's a good idea to try to please those who are worth pleasing.

* * *

The cat may not catch so many mice, but if she stays on the job, they are much less troublesome.

* * *

When you hear of one lawyer suing another it will be plenty of time to hire one.

* * *

The man who has the most to say about it, doesn't talk until everybody else gets through.

PROCEEDINGS OF HOUSE OF DELEGATES—1937

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MICHIGAN STATE MEDICAL SOCIETY

SEVENTY-SECOND ANNUAL MEETING

Proceedings of House of Delegates

Pantlind Hotel, Grand Rapids, Michigan

September 27, 1937

Monday Morning Session

September 27, 1937

The first session of the House of Delegates of the Michigan State Medical Society, meeting in Annual Session at the Pantlind Hotel, Grand Rapids, Michigan, September 27, 1937, convened at nine twenty-five o'clock, Dr. Frank E. Reeder, Flint, Speaker of the House, presiding.

THE SPEAKER: I shall ask the meeting to come to order.

Is the Credentials Committee ready to report?

DR. A. G. SHEETS (Eaton): We are ready to report, Mr. Speaker. There are approximately 100 delegates registered, but in the room with proper credentials are 75. A quorum is now present.

THE SECRETARY: I hold in my hand a list of 75 accredited delegates. This being a quorum of the House, I move that it constitute the roll call of the first session of the House of Delegates.

The motion was regularly seconded, was put to a vote and carried. Following is the roll of the House for the three sessions:

I. RECORD OF ATTENDANCE

COUNTY	DELEGATE	Session		
		1st	2nd	3rd
1. Allegan	W. C. Medill, M.D.	x	x	x
2. Alpena	F. J. O'Donnell, M.D.	x	x	x
3. Barry	R. B. Harkness, M.D.	x	—	x
4. Bay-Arenac-Iosco-Gladwin	Roy C. Perkins, M.D.	x	x	x
5. Berrien	Wm. C. Ellet, M.D.	x	x	x
6. Branch	R. L. Wade, M.D.	x	x	x
7. Calhoun	A. T. Hafford, M.D.	x	x	x
	Harvey Hansen, M.D.	x	x	x
8. Cass	W. C. McCutcheon, M.D.*	x	x (ill)	
9. Chippewa-Mackinac	W. F. Mertaugh, M.D.	x	x	x
10. Clinton	Dean W. Hart, M.D.	x	x	x
11. Delta	Wm. A. LeMire, M.D.	x	x	x
12. Dickinson-Iron	E. M. Libby, M.D.	x	x	x
13. Eaton	A. G. Sheets, M.D.	x	x	x
14. Genesee	Robert D. Scott, M.D.	x	x	x
	Donald R. Brasie, M.D.	x	x	x
	Frank E. Reeder, M.D.	x	x	x
	(Not represented)			
15. Gogebic				
16. Grand Traverse-Leelanau	E. F. Sladek, M.D.	x	x	x
17. Gratiot-Isabella-Clare	Myron G. Becker, M.D.	x	x	x
18. Hillsdale	Luther W. Day, M.D.	x	x	x
19. Houghton-Baraga-Keweenaw	Alfred La Bine, M.D.	x	x	x
20. Huron-Sanilac	(Not represented)			
21. Ingham	L. G. Christian, M.D.	x	x	x
	C. F. De Vries, M.D.	x	x	—
	R. L. Finch, M.D.	x	x	x
22. Ionia-Montcalm	A. I. Laughlin, M.D.	x	x	—
23. Jackson	Philip A. Riley, M.D.	x	x	x
	James J. O'Meara, M.D.	x	x	x
24. Kalamazoo-Van Buren	R. G. Cook, M.D.	x	x	x
	R. J. Hubbell, M.D.	x	x	—
	A. E. Pullon, M.D.	x	x	x
25. Kent	A. V. Wenger, M.D.	x	x	x
	Wm. R. Torgerson, M.D.	x	x	x
	Carl F. Snapp, M.D.	x	x	x
	Paul W. Kniskern, M.D.	x	x	x
	Geo. H. Southwick, M.D.	x	x	x

County	Delegate	Session		
		1st	2nd	3rd
26. Lapeer	H. M. Best, M.D.	x	x	x
27. Lenawee	(Not represented)			
28. Livingston	H. G. Huntington, M.D.	x	x	x
29. Luce	R. E. Spinks, M.D.	x	x	x
30. Macomb	R. F. Salot, M.D.	x	x	x
31. Manistee	E. A. Oakes, M.D.	x	x	x
32. Marquette-Alger	V. H. Vandeventer, M.D.	x	x	x
33. Mason	Wm. S. Martin, M.D.	x	x	x
34. Mecosta-Osceola	G. H. Yeo, M.D.	x	x	x
35. Menominee	S. C. Mason, M.D.	x	x	x
36. Midland	Robert E. Rice, M.D.	x	—	x
37. Monroe	Dean C. Denman, M.D.	x	x	x
38. Muskegon	E. O. Foss, M.D.	x	x	x
39. Newaygo	O. D. Stryker, M.D.	x	x	x
40. Northern Michigan	F. C. Mayne, M.D.	x	x	x
41. O.M.C.O.R.O.	C. R. Keyport, M.D.	x	x	x
42. Oakland	Ernest W. Bauer, M.D.	x	x	x
	C. T. Ekelund, M.D.	x	x	x
43. Oceana	(Not represented)			
44. Ottawa	A. E. Stickley, M.D.	x	x	x
45. Ontonagon	(Not represented)			
46. Saginaw	L. C. Harvie, M.D.	x	x	x
	C. E. Toshach, M.D.	x	x	x
47. St. Clair	A. L. Callery, M.D.	x	x	x
48. St. Joseph	Russell A. Springer, M.D.	x	x	—
49. Schoolcraft	(Not represented)			
50. Shiawassee	A. L. Arnold, Jr., M.D.	x	x	x
51. Tuscola	O. G. Johnson, M.D.	x	x	x
52. Washtenaw	J. A. Wessinger, M.D.	x	x	x
	Dean W. Myers, M.D.	x	x	x
53. Wayne	T. K. Gruber, M.D.	x	x	x
	L. J. Hirschman, M.D.	x	x	x
	G. C. Penberthy, M.D.	x	x	x
	H. A. Luce, M.D.	x	x	x
	J. M. Robb, M.D.	x	x	x
	A. E. Catherwood, M.D.	x	x	x
	W. D. Barrett, M.D.	x	x	x
	R. H. Pino, M.D.	x	x	x
	Wm. R. Clinton, M.D.	x	x	x
	Wm. J. Stapleton, Jr., M.D.	x	x	x
	R. C. Jamieson, M.D.	x	x	x
	E. D. Spalding, M.D.	x	x	x
	H. F. Dibble, M.D.	x	x	x
	C. E. Dutches, M.D.	x	x	x
	J. H. Andries, M.D.	x	—	x
	A. W. Blain, M.D.	x	x	x
	C. E. Humphrey, M.D.	x	x	x
	P. L. Ledwidge, M.D.	x	x	x
	D. I. Sugar, M.D.	x	x	x
	C. K. Hasley, M.D.	x	x	x
	J. A. Hookey, M.D.	x	x	x
	S. W. Insley, M.D.	x	x	—
	Wm. S. Reveno, M.D.	x	x	x
	H. L. Clark, M.D.	x	x	x
	M. H. Hoffmann, M.D.	x	x	x
	C. K. Valade, M.D.	x	x	x
	S. E. Gould, M.D.	x	x	x
	Frank Kilroy, M.D.	x	x	x
	L. O. Geib, M.D.	x	x	x
	S. A. Flaherty, M.D.	x	x	—
	J. W. Hawkins, M.D.	x	x	x
54. Wexford	W. Joe Smith, M.D.	x	x	x

THE SPEAKER: I declare the first session of the House of Delegates to be in session. Before proceeding with the program, I just want to make an announcement or two. As is customary, you know, we always have a Sergeant-at-Arms and we are particularly fortunate again in having one who can act in that capacity, in a dual capacity, if necessary, that is, not only as a good Sergeant-at-Arms but he can act as Chaplain as well if we need one. So therefore I again appoint Dr. James J. O'Meara Sergeant-at Arms. (Applause)

*Died October 1, 1937.

II. APPOINTMENT OF REFERENCE COMMITTEES

I would have you notice in the Delegates' Handbook on the page opposite the program that you will see the list of reference committees. I should like to call your attention to the fact that under Reference Committee on Officers' Reports, instead of Dr. H. M. Lowe the name should be Dr. Harvey Hansen. That is the only correction I have to make, except this: If there are any men absent and their alternates are here, the alternates will substitute upon the respective committees. There need be no further discussion about that. Of course, you have been appointed and have received your Handbooks in due time, so you know on which committees you belong. However, I see quite a few new faces in this audience this year and I am satisfied that perhaps some of you are not acquainted with the various chairmen of the reference committees, so therefore at this time I want to introduce to you the chairmen of the reference committees. I will ask each one to stand long enough so that you may see who he is. Later on, you will be notified as to the time and place of your meetings. Each chairman will be given a portfolio with all his respective work placed in it.

The Speaker introduced the chairmen of the reference committees.

THE SPEAKER: I should like you to know also that at this time I desire to announce the personnel of the Publicity Committee for the release of news from the House of Delegates to the press. That committee will consist of Dr. L. Fernald Foster, Secretary, Dr. Henry Cook, President-Elect, Dr. P. R. Urmston, Chairman of the Council, Dr. Henry A. Luce from the House of Delegates, and the Speaker. Dr. Foster will act as chairman of this committee.

Sergeant-at-Arms, will you please conduct the President-Elect to this rostrum? (Applause.)

THE VICE SPEAKER: We will now have the annual address of the Speaker of the House of Delegates. Dr. Reeder. (Applause.)

III. SPEAKER'S ADDRESS

THE SPEAKER: Mr. Vice Speaker, Mr. President-Elect, Mr. Chairman of the Council, Members of the House of Delegates: What I shall have to say or rather read to you this morning is not a lengthy treatise at all but rather a synopsis of what I consider the basic principles of organized medicine.

I want at this time to express my thanks and appreciation to the Senior delegates for the splendid assistance and cooperation during my terms of office for the past two years. Never once has any delegate refused to do his duty when requested by the Speaker.

To the newer delegates, and no doubt some of you are here for the first time, I welcome you into the activities of this legislative body. I hope you will take part for the valuable experience you will gain and the knowledge you will be able to impart to your County Society upon your return.

I trust you will all be prompt in coming to the sessions and that when on the floor you will abide by the custom of giving your name and the County Society you represent when addressing the chair, and I particularly request that you remain until properly dismissed.

May I say, also, as your representative on the Council, that I can truthfully report to you that, during the past year, your officers were highly efficient and that no pains were spared to give you their best efforts.

I believe the Council, as it stands today, is well chosen and each Councilor has given of his time

and effort to the satisfaction of his district. Surely great power was shown this past year and much accomplished through the united efforts of the Officers, the Council, and the Standing Committees. Particular praise must be given to the Chairman and members of the Legislative Committee. Also let us not forget the boys back home in the County Societies.

I now want to direct your attention for a few minutes to what I consider the basic principles of organized medicine.

Can you visualize what the practice of medicine must have been prior to organization? Merely individualism, with no attempt in a consulting or collective manner to advance science, ethics, or justice. Doctors simply went through life at random with no regard for each other, or the public as a whole, and such must be the feeling, it cannot be otherwise, of the thousand or fifteen hundred doctors in the State of Michigan who are without the fold.

As time went on they began to see the need of grouping for the advancement of medical science as well as to rid the profession of personal prejudice and jealousy, and to look for protection, one toward the other. And so organization took place in Michigan about 1865, with seven delegates forming the nucleus, and a Constitution and By-Laws were drawn up which guided them, and unless some unforeseen type of government shall come upon us, shall continue to guide us. It is a splendid piece of literature, I commend it to you.

Our forefathers realized that medical science was based upon one indisputable fact—the cause of disease, and to further apply this science it must be based upon solid principles which they laid down:

- (1) Medical Education
- (2) Medical Registration
- (3) Medical Laws
- (4) Public Health

Medical Education

Today the requirements of the medical student are so long in years that about one-third of his life is gone when he begins to earn a living. Surely there is no harm in the intensive training and the high standard set, but, are the students properly selected? Are we forgetting the desired qualifications of personality, proper temperament, initiative, and common sense for the book worm or Class A student? It is a fine combination but, after all, we need good bedside practitioners.

Postgraduate Education, no doubt, is the saviour of the profession, and we can be proud of our system in Michigan, and I believe would be welcomed by the thinking public if it were compulsory. The coming decade will see a drastic change in medical practice, so we must keep abreast of the times, and I ask this body to support Postgraduate Education at all times.

Medical Registration

In order to keep us in line, of course, this procedure is necessary. But why stop with a single registration unless our law of disposal of income is changed?

Our State Board is greatly handicapped because of lack of funds and is unable to properly investigate irregular practice within our own ranks. Shall we continue to mislead the public with such rackets as fluoroscopic diagnosis in unskilled hands, or electro therapists, or drug store practice, or patent medicine venders, or deceptive radio advertising? Full time industrial surgeons receiving an adequate salary and doing private practice on the side, as well as infringing on the rights of private roentgenologists. This type of practice should cease. I say let us raise funds by re-registration, or some other way,

or have the law changed back to its original reading.

Medical Laws

As the medical practice act stands today, I ask you, what does it really mean? I confess I am confused. Any law, however severe it may be, is worthless unless properly enforced. Now that we have a splendid start in raising the standard of our competitors, let us continue to legislate until the title of Doctor of Medicine means to the public what it stands for.

We have scratched only the surface of medical faking and the Michigan State Medical Society should be able to exterminate it completely. It must be done, however, by State authority with more exacting and properly enforced laws. It can never be curbed by the County Society because of embarrassment to local physicians, and so the irregular practice continues to grow.

I reiterate, "Let us give our State Board funds that it can be truly an executive body."

Public Health

Herein is the coming evolution in the practice of medicine and no doubt a vast change will take place in the next decade, in the education of the entire profession as demanded by the government. This new nation-wide movement will be legislated by the government but it must at all times be under the control and supervision of the medical profession. As you know, already under way is the national program for the eradication of syphilis. Soon to come the attack upon the high infant and maternal mortality rate. Then the investigation, prevention, and eradication of occupational disease, and other problems which now we do not foresee.

Let us be prepared. Let us be ready.

In closing I plead with you, whatever your personal feelings may be, to consider what organized medicine is doing for you. I hope that you will work for its cause and advancement, as long as you may live. (Applause.)

THE VICE SPEAKER: The Speaker's address will be referred to the Committee on Officers' Reports. I turn the meeting back to the Speaker.

THE SPEAKER: Thank you, Mr. Vice Speaker.

I am sure I express the sentiment of each one of you when I say that never before in the history of this organization, to my knowledge, has this particular occasion been denied the presence of its President. You all know the reason. I am sure we are very sorry this morning that the congenial, good-natured, hard-working President of the Michigan State Medical Society, Dr. Henry E. Perry, is not with us. At some time during this session or at a later session the Chair will gladly entertain a motion that a telegram of our sympathy be sent.

DR. L. J. HIRSCHMAN (Wayne): I don't know a better time or a more appropriate time to express our regret at the absence of the President than right at this particular moment. I was fortunate enough to be making a tour of the Upper Peninsula with him, visiting the various county societies up there, when he was stricken while working in the interest of the State Society. We know how many, many months of faithful service he gave to the Society when he was working.

At this particular time, in order that he may be cheered by the knowledge that as we open the session we are thinking of him, I move that a telegram of sympathy and an expression of good will be sent him now.

DR. ALFRED LABINE (Houghton): I second it.

THE SPEAKER: Of course, we have not yet entered the regular routine of business, but under

the conditions I shall accept the motion, as supported by Dr. LaBine from Houghton.

The motion was put to a vote and carried.

THE SPEAKER: The Secretary will act accordingly.

* * *

THE SPEAKER: By request of our President, the Executive Secretary has been asked to read the President's address. I present Mr. Wm. J. Burns.

IV. PRESIDENT'S ADDRESS

Mr. Speaker, Officers of the State Society, and Members of the House of Delegates:

Two years ago at the Soo meeting, you elected an Upper Peninsula doctor as your President-Elect and gave him a year's training for the post of President of the Michigan State Medical Society. What he learned was so well expressed by Dr. Grover C. Penberthy in his retiring Presidential address last year that I *beg leave* to quote it: "The economic problems which have grown up about us have affected the general public and the profession at large. This requires the profession to have some *political interest and activity*."

During the past twelve months, we all have witnessed the truth of this statement, and the need for unusual political interest and activity.

The medical profession has *not* been untouched by the swirl of social change going on in the world. As we are *part* of the civilization, so we *move* with it. Our *scientific* progress has always been ahead of the general parade, but our *political* and *social* progress has not been as dramatically, amazingly rapid. Steeped in our art and science, we gave *first* and almost *exclusive* thought to the *welfare* of patient, and permitted ourselves to neglect the *social* aspects of sickness.

Came the depression and we found ourselves lost in a forest of gigantic economic weeds which had been growing up about us for years. These problems vitally affected us, our patients, even the continued advance of our *science*. Untrained for the task, but having the courage and grim determination of the pioneer, the profession set out to *clear* the brush. The task was hard, the impediments and discouragements many.

We had to use tools new to men trained in *matéria medica*; we had to learn new formulæ and strange languages; we had to make new friends and enlist their help. In other words, we had to become politically and socially conscious, and take a practical world at its own face value. This we did, not without a tremendous moral struggle, and today, we begin to see a little ray of light, as though a sliver of the forest of economic problems were bowing to our axes.

I shall not endeavor to repeat what has transpired during the past year. You know the titanic struggle your State Society experienced with its legislative program, and how the untiring work of Dr. L. G. Christian and his committee, generously aided by legislative key-men throughout the State, influenced the Legislature to enact several excellent health laws. The other committees worked unabatingly during the year—their record in your Handbook is synonymous with Advancement for Michigan Medicine, both scientific and economic. The groups headed by Drs. Florence Ames, O. A. Brines, J. D. Bruce, A. M. Campbell, F. H. Cole, Henry Cook, B. R. Corbus, H. H. Cummings, L. Fernald Foster, L. O. Geib, T. K. Gruber, A. F. Jennings, P. A. Klebba, H. A. Luce, Angus McLean, R. H. Pino, H. W. Porter, L. W. Shaffer, R. G. Tuck and E. R. Witwer, gave sacrificing labor for the good of the Michigan State Medical Society, which after all is you and you and you—4,000 of you.

The officers and councilors worked hard for you

this past year—just look at the record and see the number of "State Society Nights" all over the state that had to be attended, the committee meetings, the contacts with governmental officials and agencies—days and days away from their practice; and remember, these men are physicians even as you, who must practice to provide for themselves and their families. Much of the Society's success is due to their wise generalship.

Your Secretary and the efficient staff in your Executive Office in Lansing have been a stimulus as well as a great aid to your officers and committees, and also a means of bringing in closer union the State Society and its fifty-four component county societies.

To the above friends and to all the members, who sustained me in my feeble efforts for the Michigan State Medical Society, I give my sincere and lasting thanks. You have presented me with an experience which I appreciate more than words can tell. I am deeply grateful.

Today, as you members of the House of Delegates perform your two-fold task of reviewing the past year's work and developing a program for the future, continue to consider each matter with this question in mind: Is this in the best interests of the people of Michigan and the medical profession? First, make further plans to keep the *science* of medicine always in the van. Second, open new avenues for better and better distribution of medical services to all groups and for greater contact of the county and State societies with political and social groups and individuals legally responsible for care of the indigent. Third, act vigorously to stamp out any trace of a defeatist attitude—a mental attitude that crushes a man before he begins to fight—brayed into all ears by the whelps of the depression. Let us fight for our Principles to the very end, before we admit any defeat! Remember, Medicine will never betray us—unless we betray Medicine.

I close by extending to our new President, Dr. Henry Cook, my sincerest wishes for a successful and happy administration. This he will have, given the same support and cooperation it was my great fortune to receive from you.

THE SPEAKER: The President's address will be referred to the Reference Committee on Officers' Reports.

Like the kings of old, we are having a succession of Henrys here, so it becomes my pleasure to have Henry II come upon the throne, my fellow townsman and practitioner for a good many years. I am pleased to introduce the President-Elect, Dr. Henry Cook, who will give you his address at this time.

V. PRESIDENT-ELECT'S ADDRESS

Mr. Speaker, House of Delegates:

Now about to assume the office of the President of this Society for the coming year, I am impressed with the fact that the profession of Michigan owes much to the public and to itself, and realizing this it is well that we shall evaluate the accomplishments of the past, study the needs of the public, and determine the service which we shall render in the future.

The physician has carried on through adversity in the centuries past and has ever been forging forward in an effort to render better service to the public than had been done in previous times. Having enjoyed professional freedom during this time, it has necessarily placed upon him great responsibilities.

Let me enumerate some of the accomplishments which have been based upon medical science and the efforts of our profession. The development of vaccine against smallpox, the study of the bacte-

rial causes of diseases, the development of the instruments for examination and diagnosis, the study and uses of the action of various drugs and the secretions of the body, the study and control of diphtheria and typhoid fever are all illustrations of accomplishments of the past. Humanity has benefited more from the contribution of the physician than it has through the mastery of man's environment by the discoveries in physical sciences. It has also benefited far more socially by the work of the physician than it has by inventions in government.

Recognizing that these accomplishments have been effected and made possible entirely as a result of medical knowledge largely produced through the work of individual practitioners, we still must recognize the fact that we have a great responsibility in front of us. We must ask ourselves—are we as a whole rendering to the people a complete medical service and one that is of as high quality as they are entitled to? It is our responsibility to study these problems, recognizing that there are groups of people who, for various reasons, do not or can not obtain the medical service which they need. I think we must make the claim that there are many people today who do not seek the medical service they need even if they are able to pay for it. This undoubtedly is because of lack of understanding of the problem. Then too, we have another group which is unable to purchase medical care because of limited means. This applies to the indigent and borderline group. Then there is the group which is able to purchase the proper medical care which they need.

We must also recognize that there are many medical problems in connection with the public as a whole, which need a better understanding by the profession and by the public, and it is our responsibility, as a profession, because of the fact that it is our business to handle medical and health problems, to assume a proper leadership in the study and solution of these problems, and having in mind that there is a need of this work being done, and that the profession should assume that responsibility to a great degree, a program has been outlined and approved by the Council of the State Medical Society. I shall enumerate to you some of the things which we hope to accomplish in this ensuing year:

I Leadership in formation of a Michigan Health League. Physicians, dentists, nurses, pharmacists, morticians and laymen.

II Strengthening County Society organization to the end that it assumes aggressive medical leadership in the community:

1. Health education of the public (radio and personal appearance);
2. Contacts with governmental officials and agencies in solution of their medical problems;
3. Develop programs to fit new laws and medical regulations;
4. Regional meetings with State Councilors, officers and delegates, to accomplish greater County Society activity.

III Developing and executing programs for more complete distribution of medical services to all groups:

1. Recommendation of various types of medical programs now in use, best applicable to individual counties;
2. Medical service to the *indigent* in accordance with new welfare laws;
 - (a) Direct outdoor medical relief;

- (b) Continuation of coöperative work under the Afflicted Child and the Crippled Child Law;
 - (c) Medical service to old age pensioners, the blind and widows.
 - 3. Medical service plans to the *borderline group* who need deferred payment plan (many need not be indigent, if a coöperative plan is developed);
 - 4. Continuation of good service to the *economically comfortable* in your own community on a reasonable competitive basis.
- IV Continuing with renewed vigor the well-developed Scientific Program of treatment and the development of prevention and control of syphilis, tuberculosis, cancer, preventive medicine, studying and dealing with problems of mental hygiene, accident prevention, etc., and elaborating existing educational programs, especially the postgraduate and extension courses. Physicians take the initiative, and coöperate with other groups.**
- V Increasing the membership of County Medical Societies, on the basis of above activities.**

Let me now go back and emphasize these different divisions of work which have been enumerated.

The officers of the State Society and the members of your committees who have been dealing with legislation and health of the people, are extremely impressed, and are constantly urging that next year every effort shall be put forth to the development of a Health League, realizing that a much fuller measure of success in health problems will be accomplished if all of these groups become interested in them and put forth a united effort. Having this in mind we hope to increase the effectiveness of this organization.

It takes a little time for one who is not in close contact with this to realize the importance of it. Just let me cite an instance of what happened when your Legislative Committee contacted certain committees in the legislature. The remark that was made by a chairman of one of the committees was this: "We are very glad to see you people all come up here together. In the past, one of you would come at one time and another at another time, and another at another time. How can anyone disregard you when you come united?"

Second—The matter of strengthening County Society organization to the end that it assumes aggressive medical leadership in the community. There is not a community in the State of Michigan today which does not have various lay groups which are taking considerable interest in medical and health matters. *That is a healthy state of affairs if the motive behind it is good and the manner of procedure by them is conducted properly. It is a dangerous situation if it is not done in the right way.* In many instances these groups are assuming to direct the health policies of the community. In some of these communities they are seeking the advice of the medical profession; in other communities they are disregarding the medical profession either for the reason that the medical profession is not interested, or for the reason that they wish to disregard them. *We must become cognizant in our own communities of that situation and attempt as a profession to meet it. We cannot say, "Well, let them hang themselves," as often as we do if they do not see our viewpoint, if they don't approach it in the manner in which it is best to do it. We must go to them and say to them, "You are interested. We want your coöperation and your help and we want*

to help you but you must approach this thing in the right way if you expect to get results." In that way we have been misunderstood. They have gone their way on their own proposition to the end that nothing was really accomplished and harm was sometimes done. It is our fault as well as theirs and we must recognize it. There are problems of health and medical care in all communities which have to do with governmental officials including judges of probate, boards of supervisors, poor commissioners, health departments and city physicians. Just recently there has been adopted in Michigan a group of welfare laws and medical regulations which affect very intimately the public and the medical profession. Many County Societies at present are studying these problems and working out programs. However, I feel that the majority of the County Societies, especially the smaller counties, are not giving any study to these problems. It is the opinion of many of your officers and committee members that the profession in the various communities is missing an opportunity in not meeting their responsibility in disregarding these problems. The public wants education in health matters, and by radio and personal appearance before lay groups we can accomplish much in health education. By offering to these governmental agencies our services and advice in the solution of their problems, we will make many friends and they will feel that we are awake and anxious to assist them, to the end that when they have these problems facing them, which are medical in character, the first one they will think of is the County Medical Society and the doctors in their community, rather than to go on trying to solve them in their own way. The prestige of the profession will be greatly enhanced by this co-operation.

If we assume our leadership and responsibility to fit into the new welfare laws of the State previously enacted, it will be possible for us to improve the quality of medical service offered to these indigents, and, also, we will be benefited financially thereby.

If we are to develop these programs completely next year and in the future, it will be necessary that regional meetings be held by the councilors, officers and delegates to the State Society meeting with the officers of the County Societies, endeavoring to develop and stimulate an interest in their problems in the various communities. It is our belief that it is our responsibility to see that every one in our community shall receive the medical services he needs and shall pay in accordance with his ability to pay. This will require that we study methods of furnishing medical service in effect in other communities like our own in order that the best service shall be available to those on relief, to the borderline group and to those who are economically comfortable.

The medical profession, through its State and County Societies, must also accept with renewed vigor, the responsibility for seeing that the problems of the prevention and control of diseases such as syphilis, tuberculosis, cancer, preventive medicine, problems of mental hygiene and accident prevention, are properly studied and properly handled. In order to accomplish this it will require the extension of educational programs of both the public and the physician, through our health educational programs to the public and our postgraduate extension courses. The physician must take the initiative and he should coöperate with all groups which have to do with these problems.

I think in the discussion with members of the Society who have given a great deal of thought to it, that which stands out most in their minds is this: In this growth of our state and our commu-

ities, if the physician has lost any part of that position of confidence and leadership in the eyes of the public, it must be re-established. It is difficult for a physician as an individual to do that, and we now are asked as a group to do it. In the time when we occupied that position we were acting as individuals in a small community and now we have to establish ourselves upon a group basis. If we are going to do that, it is going to be entirely through the type of service that we give the public, the type of leadership, and if we meet that responsibility the physician is going to stand out in the community as he did in the past.

Men, it is up to you. The future of the profession is entirely in your hands. It is not going to be done through the solution of the economic problems of ourselves as it is through the solution of the health problems of the community. There are many problems in your communities. How much do you know about what your county spends for the care of tubercular and communicable disease cases? How much do you know about what they are spending for the prevention of those diseases? It is we who can show them what they can save economically in the tax dollar in that county. If we can show our county that the money we will spend for prevention will save much in the way of cure, they will learn to listen and to use and respect our judgment. It is only through a full realization of that kind that we can establish confidence in the profession. They think well of us as doctors. They say the doctor is all right, but when they come to the profession as a group, sometimes they don't think of the doctors in that same way. We have to think more along those lines. . . . (Applause.)

We must recognize the fact that there are still many diseases which are not controlled. Let me call attention to the fact that the sub-committee on the prevention and control of syphilis, a part of the Preventive Medicine Committee, worked out a program which was publicized in the JOURNAL OF THE M.S.M.S. This was submitted to the State Commissioner of Health for his approval, and to the Surgeon General of the U. S. Public Health Service, and is a well worked out plan. It is my understanding that the U. S. Public Health Service, because of lack of funds, has not been able to come into Michigan to effect this program or any other program. I see no reason why the profession of Michigan should wait for the U. S. Public Health Service to step into Michigan and put it into effect, and I question very much if they will approve of this program as outlined, since everything points to the fact that they are favorable to the establishment of clinics in various parts of a state where they are conducting the programs. If these clinics should be established and the work accomplished, there is no one here who is foolish enough to believe that these clinics will be eliminated. The personnel of these organizations will find other problems to perpetuate themselves in employment at the expense of the profession and the public. The State of Michigan and the counties of the State of Michigan, are spending thousands and thousands of dollars each year for the care of tuberculosis, and very little money is being spent in Michigan for the prevention of tuberculosis. This is a problem which needs the attention of the profession, and we should be leaders in pointing out to the State what we can be accomplished in savings by prevention and control.

The problem of cancer today is being handled very efficiently by the Cancer Committee of the State Society. Many lectures and exhibits have been put on by this committee all over the State. Every County Society should do more to cooperate with them.

The Preventive Medicine Committee of the State Society has had a very well worked out program. They have met with much difficulty and lack of cooperation from various sources in effecting their program.

We must not disregard the fact that accident and degenerative diseases today are taking the place of the more acute and infectious diseases as to the cause of death.

The profession of Michigan should be accepting leadership in problems of mental hygiene. We cannot disregard the fact that the mentally deficient and the insane are not being properly cared for in our state, and we should be lending every effort possible in the solution of these problems.

If the profession recognizes these problems, their opportunities and responsibilities, and meet them as they should, their prestige will have been enhanced, the public will have great confidence in the doctor, will recognize him as he would like to be recognized, and his status in the community will have been insured. If these things are accomplished, the membership in the County Societies will grow and every one will want to become a member of such an organization.

In conclusion I shall this year do everything in my power as President of the M.S.M.S. to carry out this program as outlined, in the interest of the public and the profession, and I am asking that you, each one individually, and in your committees and organizations, support and cooperate with me in this effort.

THE SPEAKER: The President-Elect's address will be referred to the Reference Committee on Officers' Reports.

The next item is the annual report of The Council.

VI. ANNUAL REPORT OF THE COUNCIL

I understand that the officers have gone to a great deal of trouble and quite a little expense to put out this Delegates' Handbook for your knowledge and to prepare yourselves in coming here as well as to save time in these meetings. So when I ask for a report such as this annual report of The Council, you naturally are referred to your Handbook for that report, but I also shall ask the chairman for any further modified report or supplemental report. Therefore, this morning I call upon the Chairman of the Council, Dr. P. R. Urmston, for any further report of the Council. Dr. Urmston. (Applause.)

DR. PAUL R. URMSTON (Bay): Mr. Speaker, Officers, and the House of Delegates: You have just heard Dr. Cook's program for next year. The program of last year involved so many questions and so many meetings that we thought it advisable this year, instead of standing up here and reading off this report, to publish it in the Delegates' Handbook. Our officers last year fulfilled every resolution and every desire of the House of Delegates. Most of the officers traveled from 15,000 to 17,000 miles and spent over a month away from their offices for "state night" meetings. In traveling over the territory we discovered many local problems in the fifty-four component societies that the state officers are asked to settle. We find we cannot do that as most of them are local problems, but we offer our assistance.

There are one or two things we have noticed in these travels. One is that where a county society has an efficient secretary, that society is active. Where the secretary is changed from year to year, that society needs help. Therefore, we have recommended that an efficient secretary be continued in office. Also, with regard to delegates

to this convention, when a new man comes in here he doesn't know what is going on until after the session is over. He is not returned the next year and therefore does not represent his society as we should like to have him represent it. As I look over this audience I see faces that have been here year after year. That is why the proceedings of the house of Delegates and the instructions of the Council are of value to organized medicine. We would recommend to the House of Delegates, and insist, that the men be returned year after year, that is, that the efficient delegates and secretaries be retained.

Dr. Cook's program for the year has been approved by The Council, but without your assistance in going back and giving this to your county societies in your reports and urging your county societies to assist your officers in every way, it will not be fulfilled as they wish.

In our travels they say to us, "What is the state society doing for us?"

We tell them that they are the State Society and it is what they are doing for the Society that makes it what it is today.

The Annual Report of The Council is on Page 23 in your Handbook. I hope that each one of you has read it so that when you go home you can make an efficient report to your society on the proceedings of the Council.

I have a supplemental report.

Supplemental Report of the Council

(given by Dr. Urmston)

The absence of our President has established a precedent in the annals of the Michigan State Medical Society.

Dr. Henry E. Perry is the first President to become a casualty in the line of duty.

The 1936 House of Delegates made it mandatory that the officers of the Michigan State Medical Society visit all county societies once a year.

He was performing this duty with the other officers, visiting the ten societies in the Upper Peninsula when he was stricken. We can be thankful, since this sickness had to happen, that it occurred so near the end of his term.

Words cannot express our appreciation of Doctor Perry as President of our Michigan State Medical Society.

His wise selection of committees and his untiring effort to see that all performed their duties have made 1937 the most eventful year of the Michigan State Medical Society.

Without his guidance and steadying hand this could not have been accomplished. His work in Lansing is evidence.

State Society Nights

Twenty-three "State Society Nights" have been held by many of the county societies so that your officers have visited all societies possible during the year.

Much has been accomplished for organized medicine and these contacts should be continued.

Another precedent that has been established is the printing of the Annual Report of The Council in the Handbook. This facilitates the work of the House of Delegates' Reference Committees and better study of the proceedings.

Innovations introduced by our Secretary and Executive Secretary will prove the efficiency of these officers when you have enjoyed the full program of the 1937 Convention. Another innovation this year was the meeting of all committee chairmen with the Executive Committee of The Council; outlines of the year's work were made by the Chairmen.

Pep talks were given by the officers.

This is the line we will proceed on during this coming year. Dr. Cook has called a meeting of the chairmen of committees for Thursday. Previous to this the committees have acted upon their own initiative without reporting. We have found that by monthly reports we can keep in contact with these committees much more efficiently than in the past when they made only their annual reports to the House Delegates. So each month the committees will be asked to report their activities so that The Council can act upon their reports at their regular meetings.

Meetings

Fourteen Council meetings were held, four by the full Council and the rest by the Executive Committee.

If you have read the minutes of The Council proceedings in THE JOURNAL, you will know of the many problems that have made 1937 an eventful year.

When we made our budget in January we anticipated an increase in expenses and therefore we made it mandatory that we increase the membership to take care of that.

Membership

Membership increase was set at 200 and the credit for 243 must be given to the 54 component society officers.

Finances

The expectancy of the budget for 1937 has proven true. We have had extraordinary expenses, and have cash on hand of \$9,765.68 as of September 24, 1937. If we wish to progress and fulfill the requirements of organized medicine, we must anticipate an increase in the budget in the future.

Increased membership will care for 1937.

An increase in the annual dues for the future is recommended.

In explanation of the budget, we have an off year next year, when the expenses will not be quite so high as in years when we have to have an educational fund. We have to make some plans for those years.

The Journal

The Editor and Secretary under the direction of the Publication Committee of The Council are printing a journal which gives the Michigan State Medical Society a high rating.

THE JOURNAL should be read from cover to cover, for both the scientific and economic aspects of medicine.

I don't know how many of you read your JOURNAL but the front half contains the scientific aspect and the last half contains the economic aspect of medicine. I think they are very interesting. I hope you will take your JOURNAL when you go home and look over that last part each month.

Don't forget the advertisers. Greet their detail men with this slogan "I read your advertisement in the MICHIGAN STATE MEDICAL SOCIETY JOURNAL." It will save you time with the detail men.

Support the advertisers.

Postgraduate Work

At a recent meeting of the Committee on Postgraduate Medical Education, the Councilors were made Chairmen of the centers for postgraduate courses and are held responsible for arrangements and attendance.

Just this point there. In your Handbook, under the By-Laws, if you will turn to Page 103 you may read the duties of The Council and of the Councilor

for your district. I think this is the first time more duties have been prescribed for the Councilor. I think each county society should know what it should expect from its Councilor in its own district. . . . (Applause.)

The attendance is increasing each year and much credit should be given this committee for these valuable courses. Plans for giving credit attendance at the Michigan State Medical Society Convention courses are in formation.

Legislation

All new laws have been printed in your JOURNAL. Study them. This committee has made history. They had the full support of The Council and no bill was supported or introduced without approval of The Council.

Your attention is invited to Chapter Six, Section 2, paragraph 2 of the By-Laws which govern the members of the Society and Legislative Committee. All should read this Section.

Committee Reports

Committee Chairmen in person have been asked to make monthly reports to their Council. This increases interest and efficiency.

Read their full reports in the Handbook. Their recommendations for the future are of value.

Progress

All recommendations of Committees authorized by the House of Delegates have been carried to completion by The Council.

The plans of President-Elect Dr. Henry Cook approved by The Council will make membership in the Michigan State Medical Society an honor and appreciation in 1938.

Respectfully submitted,

THE COUNCIL, *Michigan State Medical Society.*
September 27, 1937.

THE SPEAKER: The report of the Council, as well as its supplemental report, will be referred to the Reference Committee on Reports of the Council.

The next matter of business is that of the report of Delegates to American Medical Association. Is the chairman present? Dr. Brook!

VII. REPORT OF DELEGATES TO A.M.A.

Perhaps the most important meeting of the A.M.A. House of Delegates held in a generation at which were considered problems of various types vitally affecting the every day activities of every doctor in the United States, some even radically changing methods of practice, was held at Atlantic City June 7th to 11th of this year.

That your delegates were active and truly representative is attested to, First, by having introduced four of the twenty-six resolutions acted upon; Second, by having been assigned two committee chairmanships and one other committee appointment; Third, by presenting arguments before reference committees and Fourth by participating in open debate before the House upon such subjects and in such manner as in our judgment seemed best for the medical profession as a whole. The stenographic proceedings of the House are not published—it would take too much space. Nevertheless the arguments pro and con from a geographical, political or medical viewpoint are most interesting. And the Michigan delegates did their share.

Dr. H. A. Luce was named chairman of the Committee on Rules and Order of Business and Dr. J. D. Brook was named chairman of the Committee on Miscellaneous Business and member of the Committee on Scientific Award. That was really honoring

Michigan when you consider that there were only thirteen such appointments available among 170 delegates from the 48 states, the island possessions, Alaska, Army and Navy and 15 sections.

This report brings to you under various headings some of the subjects in which we feel you are interested. The following report on "Reports of Special Committees" is presented by Dr. Claud R. Keyport.

1. The Committee on Miscellaneous Business to whom was referred the report of the *Committee to Study Problems of Motor Vehicle Accidents*, recommended that since the causes which are attributed to the physical and mental phase of traffic accidents are greatly in the minority, the responsibility of the medical profession does not go beyond making recommendations for curbing of driving by mental and physical defectives.

The committee further recommended a standard drivers license law and urges the legislative committees of the various state societies to extend their activities to this end. Because of the general apathy toward the obedience of any law, the primary, individual and collective objective to reduce traffic accidents, should be the rigid enforcement of the present law.

2. *Report of Special Committees to study Contraceptive Practices and Related Problems* was appointed by the Board of Trustees June 11, 1935, pursuant to a resolution adopted by the House of Delegates. The committee submitted its first report to the House of Delegates at the Kansas City meeting in 1936. This report was adopted by the House of Delegates and the committee was continued for another year. This year at Atlantic City, the committee submitted a report limited to a consideration of the prevention of contraception only as it refers to the relation of physician and patient.

The following recommendations by the committee were adopted by the House of Delegates:

1. That the American Medical Association take such action as may be necessary to make clear to physicians their legal rights in relation to the use of contraceptives.

2. That the American Medical Association undertake the investigation of materials, devices and methods recommended or employed for the prevention of contraception, with a view to determine physiologic, chemical and biologic properties and effects, and that the results of such investigations be published for the information of the medical profession.

3. That the Council on Medical Education and Hospitals of the American Medical Association be requested to promote thorough instruction in our medical schools with respect to the various factors pertaining to fertility and sterility, due attention being paid to their positive as well as to their negative aspects.

3. *Committee on Distinguished Service Awards.* By an amendment to the By-Laws of the Association, a new chapter XI provides that a special committee be created to be known as the Committee on Distinguished Service Awards of the American Medical Association. The Committee shall consist of five men. Nomination for the award may be made by any fellow of the Association, provided it is made in a manner prescribed by the Committee and not less than two months in advance of the next regular annual session of the Association. The committee shall consider the eligibility of nominees for the Distinguished Service Award of the American Medical Association on the basis of meritori-

ous service in the science and art of medicine and shall submit its findings and recommendations to the Board of Trustees annually. The Board of Trustees shall create and establish an award to be known as the Distinguished Service Award of the American Medical Association which shall consist of a medal and a citation.

It was very gratifying to the delegates from Michigan to know that our senior delegate, Dr. J. D. Brook, was reappointed a member of the committee on Distinguished Service Awards of the American Medical Association for a term of two years.

Due to an inopportune occurrence and consequent lack of time, Dr. L. J. Hirschman was unable to present his contribution on the subject of "The Report of the Board of Trustees and Secretary." Therefore in pinch-hitting for Dr. Hirschman, I feel I have made only a bunt but should be given the decision at first base for brevity.

The Report of the Board of Trustees and Secretary covering approximately 100 pages of the Handbook are replete with information and suggestions. The committee to which these reports were referred was as concise as possible in their recommendations, but at that their findings cover three columns of the House proceedings. Obviously it would be unfair to your time to even comment upon the various subjects very deftly treated by the Board. We therefore recommend to you the *reading* of these reports to the end that the individual doctor may grasp some idea of the voluminous and painstaking work being done at the Central office for organized medicine.

Best qualified to pick the wheat from the chaff on the subject of "Resolutions introduced" is Dr. H. A. Luce, who contributes as follows:

As usual in all representative types of conventions, much of the value consists in the informal discussion among the delegates about the hotel lobby, luncheon table, et cetera. The delegates discuss the problems that arise in their various districts and methods of approach to the solution. Most of the Michigan delegates have a large acquaintance with the other delegates and much confidential information is obtained that is of great value.

In conventions of any type, serious problems sometimes never appear in the public transactions of the meeting because it is not proper to take open action. For example, serious thought was given to the system of health service which appears to be a set-up of HOLC employees. This service includes complete medical, surgical and hospital services under the supervision and service of full time doctors. It is worth careful observation by medical organizations since it appears to violate many of the accepted principles of medical care and has formidable possibilities.

The House of Delegates considered and adopted many and far-reaching resolutions. Several of the more important are as follows:

Approved the campaign against syphilis.

Stressed the value of preventive medicine.

Provided for the creation of a Council on Industrial Health.

Defined "free choice of physician" as applied to contract practice and so amended the principles of medical ethics.

Defined hospital care under group hospitalization contracts as to consist of room, bed, board, routine nursing care and routine drugs, excluding all medical care.

Provided that the staffs of hospitals approved for intern training shall be members of their county medical societies.

Urged the formation of a national department of health under one head, in which would be consolidated all the health activities of the government.

Passed a resolution to provide for the selection of a meeting place three years beyond the time for the meeting.

Recommended that all county societies coöperate with rural organizations in providing good medical service to their respective communities.

Recommended that the American Medical Association establish a new Council on Industrial Health to consider the ever increasing phases of occupational diseases.

Resolution on the "Family Physician and the School Child," introduced by Dr. Burt R. Shurly, was adopted with slight change. The chief points in this resolution were that the name and address of the family doctor should appear upon the school card of every pupil and that in case of sickness or accident both the parents or guardian of the child and the family doctor be notified by the school authorities. A second point was that examination made by the family physician be accepted in lieu of the examination of the school physician.

Regarding the resolution on "Daily Census of Hospitals" introduced by Dr. Henry A. Luce, we report as follows:

Delegates to the A.M.A. were instructed by the House of Delegates at last year's meeting to present to the Council on Medical Education and Hospitals of the A.M.A. through the House of Delegates of the A.M.A. a resolution for the purpose of securing accredited internship approval for hospitals of 50 bed census. The subject was introduced by Dr. Luce and followed through to the Reference Committee by the Michigan Delegates accompanied by Drs. Penberthy and Hoffmann. The committee acted favorably on the resolution which was subsequently unanimously adopted by the House. Very shortly after this, Mercy Hospital and Foote Hospital of Jackson, Michigan, were placed on the approved internship training list.

Resolution requesting "North Central Association of Colleges to Amend Its Manual" introduced by Dr. T. K. Gruber was referred to the Committee on Medical Education. The request as set forth in the resolution was unanimously adopted in the following words of the committee recommendation:

"Your committee would urge that the North Central Association of Colleges and Secondary Schools modify its manual of accrediting procedures to permit each member institution to adopt its own health service in conjunction with its own County Medical society and to comply with the principles enunciated in paragraph I of the summary published on Page 95 of the Handbook."

Resolution introduced by Dr. L. J. Hirschman on the "Establishment of a Department of Public Relations" was referred to the Committee on Legislation and Public Relations, which gave it hearty approval in the following words: "Resolution on the Establishment of a Department of Public Relations has the hearty endorsement of your reference committee, which recommends its adoption in letter and in spirit and that the Board of Trustees indicate the technic of its accomplishment." This committee recommendation was unanimously adopted by the House.

Resolution introduced by Dr. H. C. Luce regarding the "Evils from Promiscuous Use of Barbituric Acid and Derivative Drugs," was unanimously adopted upon the following recommendation of the Committee on Miscellaneous Business: "Your reference committee recommends that the resolution be referred to the Board of Trustees with the request that the Bureau of Legal Medicine and Legislation take such action as in their judgment seem proper

to bring the use of these drugs under government control as requested in the resolution." This committee recommendation also was adopted without a dissenting vote.

Without question the most outstanding resolution presented was one introduced by Dr. Samuel J. Kopetsky of New York on "The Development of a National Health Program." This was the resolution which recommended the Federalization of medical practice. The Committee to which it was referred—the Committee on Executive Session, Dr. Thomas A. McGoldrick, New York, Chairman—reported as follows at the Tuesday afternoon Executive Session:

"Your reference committee believes that this subject presented here is too important, too vast and too widespread in its application to be justly and adequately considered in a few hours or even a few days by any reference committee. It recommends that the resolution be referred to the Board of Trustees of the American Medical Association for consideration and action at the earliest possible time."

Dr. Thomas K. Gruber, the baby of the delegation, has done an excellent job in his initial performance in reporting the high spots on the addresses of the Speaker, President and President-elect as follows:

The complete text of the addresses given by Dr. M. B. Van Etten, Speaker of the House of Delegates, Dr. Charles Gordon Heyd, President of the American Medical Association, and Dr. J. H. J. Upham, President-elect of the American Medical Association, were published in the June 19, 1937, issue of the *Journal of the American Medical Association*. The report of the Reference Committee on Reports of Officers reviewing these addresses was published in the June 26, 1937, issue of the *Journal of the American Medical Association*, and each member of not only the House of Delegates of the Michigan State Medical Society but each member of organized medicine should read these essays carefully, and thoughtfully peruse the material presented.

Dr. Van Etten, the speaker of the House of Delegates of the American Medical Association, pointed out that as far back as the era of Babylonian culture, four thousand years ago, medical men were organized and they were organized for the protection of the public. They were also organized for the purpose of improving the service rendered to the public by the physician. There was stressed in his address the responsibility of those elected to the administrative offices of organized medicine for the proper presentation of not only the attitude of the doctor but the possibility of obtaining by the public of better medical service for themselves through the use of facilities made available by the doctor.

Dr. Charles Gordon Heyd, President of the American Medical Association, pointed out many of the pertinent problems that are confronting not only the doctor but the recipient of the doctor's services. He outlined most admirably the difficulties confronting those elected to the high offices of the association in solving the problems at issue and reassured the profession that in the future as in the past medicine would solve these problems and continue to give the public adequate medical care. Dr. Heyd further pointed out "the ranks of organized medicine must stand fast, must speak unanimously with one resonant voice, so that medicine shall be free to explore the unheralded realms of science and march forward with increasing effectiveness. Hundreds of years ago it was stated that 'where there is no vision, the people perish.'"

Dr. J. H. J. Upham, President-elect of the American Medical Association, iterated and reiterated the

same general theme that was present in the addresses of the Speaker of the House of Delegates and the President of the Association. "Those familiar with the ideals and policies of the leadership of the American Medical Association know full well that those policies aim toward evolution rather than revolution."

No one can read these three doctors' addresses without realizing the unanimity of thought regarding what is going on and what is necessary, in not only protecting the public but the practitioner in placing both in a proper position regarding the health of the entire country, and, as stated at the beginning of this digest, each and every doctor in Michigan should be urged to personally read and carefully peruse these documents.

Although it is not in chronological order it is perhaps fitting to mention here that the House was honored at a special executive session on Thursday morning, June 10, to be addressed by Senator J. Hamilton Lewis of Illinois, who spoke very feelingly and at some length concerning socialization of medicine. It is not necessary at this time to comment on what Senator Lewis said, since you are undoubtedly familiar with it. It was printed in full in the *Journal of the American Medical Association* beginning on page 2221 and given wide publicity in the newspapers. One, however, wonders what, if any connection existed between Dr. Kopetsky's resolution and the defense of socialized medicine by Senator Lewis.

The address of Senator Lewis was referred to the Board of Trustees for consideration and for subsequent reference to the House of Delegates, if, in its wisdom, consideration by the House of Delegates is deemed to be necessary.

While we are firm believers in law observance, we nevertheless maintain it to be our inalienable constitutional right to use every honorable means to prevent the passage of a law which would impose upon the public and the doctor unnecessary fundamental changes in practice.

We therefore recommend to the officers of our Society and to this House of Delegates that the closest possible affiliation and coöperation be maintained with the officers and Board of Trustees of the American Medical Association to the end that unity of thought and action may enhance our defense in the battle with socialized medicine.

We believe the public is not yet ready to bow to those who would transform the doctor into a robot, controlled by lay pushbuttons, to thus terrorize the victim of real pathology with a mechanical crown of thorns.

The election of officers was unique in its execution. All were elected without opposition, upon motion to suspend the rules, by acclamation.

We refer to you briefly and request that you read the very excellent acceptance speech by the newly elected President-elect, Dr. Irving Able of Louisville, Kentucky.

We hope we have not unduly burdened you with the length of this report, but there is no other manner in which to bring to you concisely the high spots of a three day session of the National House.

While attending the sessions we have constantly in mind the wishes of those we represent. Michigan has a potent voice in the deliberations of its national body. To carry out your instructions, to enhance your collective and individual attainments is not only our obligation but our desire.

Respectfully submitted,

Delegates: J. D. BROOK, H. A. LUCE, L. J. HIRSCHMAN, C. R. KEYPORT, T. K. GRUBER.

THE SPEAKER: The report of Delegates to the American Medical Association will be referred to the Reference Committee on Reports of Standing Committees.

VIII. REPORTS OF STANDING COMMITTEES

The reports of Standing Committees, as you know, are published in the Delegates' Handbook. The chairman of the standing committees will be asked for further reports or supplemental reports. If there are any chairmen of subcommittees to report, I shall ask the chairmen of the standing committees to introduce the chairmen of their subcommittees immediately following.

The first standing committee to report, then, is the Legislative Committee. Dr. Christian.

1. LEGISLATIVE COMMITTEE

DR. L. G. CHRISTIAN (Ingham): Mr. Speaker, the report is in the Delegates' Handbook on Page 36. There is no supplemental report as the committee was all tired out. (Applause.)

1 (a). ADVISORY COMMITTEE ON GROUP HOSPITALIZATION

THE SPEAKER: Also submitted is the report of the Advisory Committee on Group Hospitalization, a subcommittee of the Legislative Committee (Page 41 of the Handbook.) Therefore, the reports of the Legislative Committee and its Subcommittee will be referred to the Reference Committee on Reports of Standing Committees.

2. JOINT COMMITTEE ON HEALTH EDUCATION

The report of Representatives to Joint Committee on Health Education? Is the chairman here? Dr. B. R. Corbus? (Absent.) If he should happen to return the Sergeant-at-Arms will please remind the Speaker.

If at this time there is no report from this committee the report will be referred to the Reference Committee on Reports of Standing Committees. If there is any further report it will be considered later.

The next is the Committee on Medical Economics, Dr. Pino, Chairman.

3. COMMITTEE ON MEDICAL ECONOMICS

DR. R. H. PINO (Wayne): Mr. Speaker, I wish to present the report as given in this Handbook (Page 49) with only a few additional remarks. You will notice that the uniformity that is called for in this report has been accepted in principle by The Council as a part of the program that has been outlined by Dr. Cook. We have gone into great detail and have presented the facts from time to time to The Council.

There are some principles involved that I want to call to your attention in order that there may be no misunderstanding of the need, as we go along, of some uniformity in the care of the indigent. I refer now to those on old age pensions. The largest amount that those individuals get, as I understand it, is \$30 a month.

You can understand what will happen if the medical profession asks for extra money (which should be asked for in order that these people may have medical care) and if all others interested in these people, these people they have to buy from (and they have to buy something), ask for something, from the standpoint of economics, in this process of socialization of everything.

I want to call to your attention the point that probably the money will not be forthcoming to care for the medical aspects of this thing, and therefore those people will be in the same group as indigents. When we have any great body of people cared

for through state and federal funds and we do not have some uniformity of care throughout the counties there is certain to be a chaotic condition that we cannot control which will result in the taking of this out of our hands and placing it in the hands of those who have a different philosophy.

We desire to change the name of the Economics Committee (and this will come up by resolution) to the "Committee on the Distribution of Medical Care," for the reason that when the sociologist thinks about these things it is not in relationship to the cost except the cost to the individual, not the great national cost. They think of it in terms of whether or not we are distributing this care.

In the program as set forth in the Handbook we have in mind the responsibility of seeing to it that these people all do get care. That leads to one other danger that I want to call to your attention for the reason that the county societies, especially where there is a large population, need to give thought to this fact. In the minds of many people there are two classes who need medical care and who are affected from this economic angle. There are those who can pay and those who cannot pay. We need to give thought to plans whereby those who come in between can pay part, and if we tend to disregard that responsibility then others are going to take care of them.

Therefore, in connection with the work in our probate courts we must bear in mind that we must fix it so that those for whom it has been determined that they can pay will have some arrangements made whereby they can pay what they can and as they can. In other words, if the person needs to have a tonsillectomy and says he hasn't the cash, but the cost is going to be \$25, we must arrange a system or a method whereby he can take care of that, a little bit at a time, as he can, or else we are going to make two decided classes, those who can pay readily and those who cannot, with the result that with the present sociological trends we will dump many thousands of people into the group of those who can pay nothing.

I call it to your attention because it is my impression that there are some who think, "Oh, well, these will be taken care of. We have always taken care of them. Let them go that way." That is not the way the sociologist looks at it at all. I hope that we may bear that in mind as we go back to our counties, especially those counties with a large population, and we may think upon this thing in connection with our probate court cases. (Applause)

THE SPEAKER: The report of the Standing Committee on Medical Economics will be referred to the Reference Committee on Reports of Standing Committees.

4. CANCER COMMITTEE

Next is the report of the Cancer Committee. **DR. O. A. BRINES. (Absent.)** The reference committee will find the report of the Cancer Committee in the Handbook. It will be referred to the Reference Committee on Reports of Standing Committees.

Next is the Preventive Medicine Committee. Dr. Geib.

5. PREVENTIVE MEDICINE COMMITTEE

DR. L. O. GEIB (Wayne): Mr. Speaker, you will find the report of the Preventive Medicine Committee on Page 54 of the Handbook and I haven't anything additional to add to that.

5(a). ADVISORY COMMITTEE ON SYPHILIS CONTROL

At this time I should like to submit for Dr. Loren W. Shaffer, Chairman of the Subcommittee on Syphilis Control, the report of his committee (to be found on page 56 of the Handbook).

THE SPEAKER: The reports of the Preventive Medicine Committee and its Subcommittee on Syphilis Control will be referred to the Reference Committee on Standing Committees.

The Committee on Postgraduate Medical Education, Dr. J. D. Bruce.

6. COMMITTEE ON POSTGRADUATE MEDICAL EDUCATION

DR. H. H. CUMMINGS (Washtenaw): Mr. Speaker, Officers and Members of the House of Delegates: Dr. Bruce regrets that he cannot be with you today. A previous engagement in Washington makes it impossible for him to be here, but he wanted me to convey his greetings and wish each one of you a very profitable convention.

In your Handbook on Page 59 you will find the Annual Report of the Committee on Postgraduate Medical Education, and on Page 64 you will find a supplemental report dealing with an Educational Endowment Fund. It is something that Dr. Bruce has in mind and I think it is worthy of serious consideration. It is quite a proposition. He asked me to present one more supplemental report and I will read it as he has written it.

Supplemental Report Postgraduate Certification

One of the very important functions, if not the most important, of a state medical society is the development of ways and means whereby the practitioner may be enabled to render the highest possible quality of service. This has engaged the attention of both state and national bodies throughout the years.

After years of experimentation and study the Michigan State Medical Society has, we believe, evolved a plan whereby this educational need is being met effectively so far as educational standards are concerned and with a minimum of effort on the part of the practitioner. Apart from the material advantages and the greater ability to serve which the Michigan program of postgraduate education offers the profession, it has been deemed appropriate that a form of special recognition be given by the Society to those who qualify in accordance with the standards set up. While additions and changes will undoubtedly be made from time to time to meet the constant advances in medical science, the Committee on Postgraduate Education feels that the courses laid down by the Society are sufficiently standardized to admit of certification of those members who have availed themselves of the various opportunities of the past eight years.

The Committee therefore recommends that certification be awarded those members who have complied with the requirements of the four-year extramural program which will be completed in November of this year. In addition to these members, the Committee recommends that certification also be awarded all of those members of the Society who have done comparable postgraduate work either within or without the State.

The Committee recommends that at the annual meeting in 1938, a suitable period, preferably the evening of the induction of the President of the Society, be set aside for the presentation of such certificates, and that all members entitled to same be urged to be present in person to receive them.

The Committee further recommends that the major portion of the evening be devoted to the discussion of higher education in medicine, for which suitable speakers should be selected.

The matter of certification was fully discussed and approved at the last meeting of the Committee

on Postgraduate Education and a typewritten form of certification is herewith presented for your consideration. It is contemplated, of course, that the certificates will be printed or engraved suitably. A form which the University uses for a somewhat similar purpose is appended to give a better idea of how the certificate might look when completed.

We beg to call to your attention to the attendance of a number of physicians who are not members of the Michigan State Medical Society. This attendance has been encouraged, but would it not be well for the Society to pass formally upon the propriety of issuing certification for attendance to non-members?

Respectfully submitted
JAMES D. BRUCE
Chairman.

DR. H. H. CUMMINGS (Washtenaw): The proposed certificate has at the top: "MICHIGAN STATE MEDICAL SOCIETY." Then it goes on: "John J. Jones, M.D., having complied with the requirements of the Michigan State Medical Society, is hereby awarded a CERTIFICATE OF ATTENDANCE IN POSTGRADUATE EDUCATION—1937."

It is signed by the President of the Society, by the Chairman of the Postgraduate Committee of the Society, and the Secretary. The certificate will appear something like this (displaying). Thank you. (Applause)

THE SPEAKER: The Supplemental Report of the Committee on Postgraduate Medical Education will be referred to the Reference Committee on Reports of Standing Committees.

7. PUBLIC RELATIONS COMMITTEE

DR. L. FERNALD FOSTER: The report of the Public Relations Committee is complete in the Handbook.

THE SPEAKER: The report of that committee, therefore, will be referred to the Reference Committee on Standing Committees.

8. ETHICS COMMITTEE

DR. H. W. PORTER: That report, I believe, you will find complete in the Handbook. It likewise will be referred to the Reference Committee on Standing Committees.

That completes our first session. It is now eleven-ten. At this time I should like to have the chairmen of those reference committees come before the Speaker's table and receive their portfolios and announce to their committees when and where they will meet.

Members of the House: It would seem to me that inasmuch as there is much to do at the second session and as we have now completed our first session at approximately eleven-fifteen, I would like to have instructions from the House as to whether it would not be feasible to advance the hour of meeting this afternoon to two o'clock. I believe that approximately three hours should give those reference committees ample time and I feel we are going to need every bit of the afternoon for the second session. The Chair would like your instruction.

DR. C. F. SNAPP (Kent): I so move, that we advance the hour to two o'clock.

DR. GROVER C. PENBERTHY (Wayne): Second it.

The motion was put to a vote and carried.

THE SPEAKER: The Chair will now entertain a motion to recess.

DR. WM. J. STAPLETON (Wayne): I so move.

DR. W. F. MERTAUGH (Chippewa-Mackinac): Second.

PROCEEDINGS SEVENTY-SECOND ANNUAL MEETING

THE SPEAKER: Before I put that motion to a vote I should like to take the time to read this telegram from our President:

Wishing you every success in your undertaking at this, the seventy-second annual meeting of our Society. I am pulling for you every minute. Feeling better each day.

H. E. Perry. (Applause)

The meeting was recessed at eleven-seventeen o'clock.

Monday Afternoon Session

September 27, 1937

The second session of the House of Delegates convened at two-ten o'clock, Speaker Reeder presiding.

THE SPEAKER: The meeting will come to order.

Is the Credentials Committee ready to report?

THE SECRETARY: I hold in my hand the names of 80 accredited delegates. This being a quorum for the second session of the House of Delegates, I move that it constitute the official roll call of this second session.

The motion was regularly seconded, was put to a vote and carried.

IX. REPORTS OF SPECIAL COMMITTEES

THE SPEAKER: I therefore declare the second meeting of the House of Delegates open and ready for business. We shall proceed. Now going to reports of special committees, first is the Maternal Health Committee.

1. MATERNAL HEALTH COMMITTEE

This report, as found on Page 71 of the Delegates' Handbook is referred to the Reference Committee on Reports of Special Committees.

2. CONTACT COMMITTEE TO GOVERNMENTAL AGENCIES

DR. H. H. CUMMINGS (Washtenaw): It is found on Page 74 of the Handbook.

THE SPEAKER: No further report? If not, that report will be referred to the Reference Committee on Special Committees.

3. MENTAL HYGIENE COMMITTEE

DR. HENRY A. LUCE (Wayne): Mr. Speaker, the report of the Committee on Mental Hygiene is published in the Handbook (Page 75).

THE SPEAKER: If there is no further report, that report of the Mental Hygiene Committee will be referred to the Reference Committee on Reports of Special Committees.

4. RADIO COMMITTEE

That report as found in the Handbook (Page 77) will be referred to the Reference Committee on Reports of Special Committees.

5. ADVISORY COMMITTEE TO THE WOMAN'S AUXILIARY

If there is no further report, that as found in the Handbook (Page 76) will be referred to the Reference Committee on Reports of Special Committees.

6. LIAISON COMMITTEE WITH HOSPITAL ASSOCIATION

DR. T. K. GRUBER (Wayne): The report of the Liaison Committee with the Hospital Association is found on Page 80 of the Handbook.

THE SPEAKER: The report of the Liaison Committee with the Hospital Association will be referred to the Reference Committee on Reports of Special Committees.

7. LIAISON COMMITTEE WITH STATE BAR

It is here, and will be referred to the Reference Committee on Reports of Special Committees.

8. LIAISON COMMITTEE WITH DENTISTS, NURSES AND PHARMACISTS

If there is no further report, that will be referred to the Reference Committee on Reports of Special Committees.

9. JOINT REPORT OF THE COMMITTEE STUDYING SCHEDULES A, B, C, D, AND OF THE MSMS-MHA-MAR COMMITTEE

DR. E. R. WITWER (Wayne): That is in the Handbook on Page 83. Under the circumstances, I think it would be well for the House of Delegates to be informed as regards the third paragraph. You understand that the Michigan State Medical Society, the Roentgenologists' Association, as well as the Hospital Association, were represented on this joint committee. We had several meetings with the Auditor General and the Crippled Children Commission and we had three proposals which had previously been reported to the Executive Committee of the Council of the Michigan State Medical Society. Members of this committee also visited Lansing on several occasions to confer with the Auditor General and the Crippled Children Commission.

Under the 1937 legislative amendments to the Crippled and Afflicted Child Acts, the fee schedules must be revised semiannually, on September 1 and March 1. Your committees worked with the Crippled Children Commission and the Auditor General on the schedules published as of September 1, 1937. The main point of issue, unsettled as of this date, is the matter of placing the roentgenological fee schedule in Schedules A and C, along with those of other independent practitioners, and not in Schedules B and D, the Hospital Rate Schedule, as well as the question of the amount of the discount to be allowed to the state by radiologists.

I think at a subsequent period during this session there will be some proposals made which may help to clarify some of this misunderstanding that exists. There is no supplemental report.

THE SPEAKER: The joint report of these special committees will be referred to the Reference Committee on Reports of Special Committees.

Mr. Secretary, are there any other special committees to report?

THE SECRETARY: Not to my knowledge.

THE SPEAKER: Does anyone know of any other special committees to report? Hearing none, we shall proceed.

X. UNFINISHED BUSINESS

Our next order of business is that of Unfinished Business. Other than that which is in print, is there any unfinished business to come before this meeting? Otherwise, we shall continue with that which is printed, namely four amendments to the Constitution.

1. AMENDMENTS TO THE CONSTITUTION

THE SECRETARY: These are found on Page 86 and Page 88 in the Handbook.

THE SPEAKER: That includes all four of them. This matter will be referred to the Reference Committee on Amendments to Constitution and By-Laws.

Is there any other unfinished business? If not, we shall proceed to the item of resolutions.

XI. RESOLUTIONS

1. TRANSFER OF HILLSDALE COUNTY SOCIETY TO 2ND COUNCILOR DISTRICT

DR. J. E. MCINTYRE (Ingham): I should like to call to the attention of the House of Delegates that through error a couple of years ago there was a resolution offered before the House of Delegates by a member, a delegate, I believe, from Calhoun County, not a member of Hillsdale, asking that

Hillsdale County be transferred to the Third Councilor District in place of the Second. That was an error and a petition was presented to me from Hillsdale County asking me to present it to The Council, which I did. In the meantime, Dr. Geo. C. Hafford had resigned and Dr. Wilfrid Haughey had come on the Council to represent the Third District.

We ironed it out in The Council. We settled the matter. Hillsdale's status had not changed because it had never left the Second District. However, I would be better satisfied if the delegate from Hillsdale would offer a resolution that that action of The Council be ratified by the House.

DR. L. W. DAY (Hillsdale): I should like to make a motion that the House of Delegates go on record as ratifying the fact that Hillsdale County remains in Councilor District No. 2.

The motion was regularly seconded.

THE SPEAKER: You have heard the motion. It is supported. Is there any discussion?

The motion was put to a vote and carried.

THE SPEAKER: That really is just a confirmation. I don't think that is referable to any committee, is it?

DR. J. E. MCINTYRE (Ingham): It is confirmatory of action which Dr. Haughey and myself recommend.

THE SPEAKER: I don't think you are quite right. You should really be bringing that up under unfinished business as it has been carried since last year, rather than as a resolution.

DR. MCINTYRE: The Council decided it.

THE SPEAKER: Was that matter brought to the attention of the House a year ago?

DR. MCINTYRE: I believe not, not to my knowledge.

THE SPEAKER: Then I presume that should come either under the head of new business or else have a resolution to be referred. However, it seems to be settled now.

DR. H. A. LUCE (Wayne): May I ask that the matter be settled by referring to the minutes of last year's meeting?

THE SPEAKER: Could that matter be settled by reference to the minutes of last year's meeting?

DR. LUCE: It was my impression that the matter was taken care of in Detroit.

THE SPEAKER: It does have to say who offered the motion.

DR. L. W. DAY (Hillsdale): Mr. Speaker, I believe Dr. Wade, from Coldwater of the Third District, can clarify the situation considerably.

DR. R. L. WADE (Branch): Mr. Speaker, after a conversation with some of the members of Hillsdale County Medical Society it was an understanding that Branch County had, with some of those members, that Hillsdale preferred to go into the Third District with Branch, Calhoun, and St. Joe. In the absence of the delegate from Hillsdale County, I talked to some members of Branch County and they asked me to bring this matter before the House of Delegates, and at that time I presented it. It was voted that they be allowed to do so, that Hillsdale be allowed to come into the Third District, if they desired to do so. But it appears now that they did not desire to do so, and it appears to me that their status is practically what it was before, that they are still part of the Second District.

THE SPEAKER: Would this action taken here, today, clarify the matter?

DR. R. L. WADE (Branch): I think it was clarified before.

THE SPEAKER: Are you still in the same position as you were?

DR. WADE: They preferred to remain where they were rather than come into the Third District.

THE SPEAKER: Then on the action taken here today, moved, supported and voted favorably upon by this House of Delegates—does that satisfy you?

DR. WADE: Oh, yes.

THE SPEAKER: Then the matter is settled.

DR. WADE: It makes no difference to us at all.

THE SPEAKER: With reference to Dr. Luce, what does the Secretary find?

THE SECRETARY: The following is taken from the proceedings of last year, in the November JOURNAL, Page 750, Paragraph 15.

The Secretary read the reference mentioned.

DR. R. L. WADE (Branch): The intent of that motion was that it was optional with Hillsdale County whether they do that or not.

THE SPEAKER: After all, gentlemen, are you satisfied with the action taken here today?

DR. WADE: It is perfectly satisfactory, so far as I am concerned.

THE SPEAKER: So far as your society is concerned?

DR. WADE: Yes.

DR. L. W. DAY (Hillsdale): According to what the Secretary read there, we are in the Third District. Is that right?

THE SPEAKER: You were. Of course, that motion, literally speaking, was not rescinded, while you had a new motion, just made as I take it, and passed upon here.

DR. DAY: Is that motion retroactive?

THE SPEAKER: In one sense of the word, you really have rescinded that motion. Are you now satisfied?

DR. DAY: Absolutely.

THE SPEAKER: If you are satisfied, I think the rest of us are. We shall now continue with the resolutions. I recognize the Vice Speaker.

2. DR. LEO GREGORY CHRISTIAN

THE VICE SPEAKER: Mr. Speaker and delegates: There is a time in the life of every organization when some force seems to strike. I don't mean a sort of force like lightning, which levels everything in its pathway but I mean the sort of force that we see in nature. Sometimes we see it in perennial plants. You can take a peony bush, for example. Transplant it and it will grow every year to be a pretty good-sized bush, but it doesn't blossom. Suddenly some God-given force seems to strike it and it blossoms and flowers luxuriantly.

I have been coming to this House of Delegates for about ten years, and many of you have been coming longer than I have. We have seen many great changes take place in this House of Delegates. Some of them were a process of natural evolution while others were sort of struck by a force which moves within the Society. I have been watching one of these forces rather dynamic in character; in fact, I have been on several committees with this particular individual. I recall back in the days of the depression when we were both on the Economics Committee. We tried to formulate an insurance plan whereby we would get some compensation for care of the indigent. We did evolve an insurance plan and we nearly went astray with it. This particular individual spent his force like an air brake, so to speak, and as I look back now it is probably a good thing he did. The next year we were put on another important committee, and this time we had the civic rights of 5,500 doctors at stake. It was our first time on this committee. We went up to Lansing. It was an off year with the legislature and we decided to make it an educational year. The Governor called a special session of the legislature, in which we had no particular interest, except to educate ourselves and the men

we were dealing with. In other words, we cut our front teeth on that session of the legislature.

The following year we were reappointed on this Legislative Committee. This was to be a big year for doctors. We were going to try to put through some legislation whereby the doctors would get some money for the indigent cases which we were caring for.

The committee, animated by this particular individual, "went to town," so to speak. This committee had been well manned in previous years and had been very active. Like the peony bush in my back yard, it had never had a blossom on it, but this year it did produce.

A year or so later, in fact, a year ago tonight, this gentleman was asked to head the 1937 Legislative Committee. He was very reluctant to do so. He had had enough of it. So had some of the rest of us, but some of us who thought we knew, figured that he was the only man in the whole Society who could deliver the goods. After some persuasion he was induced to accept the chairmanship.

We went along, and in February the days got pretty dark. One very valuable member of our committee died. That was the late Dr. Fred B. Burke of Detroit. Others were on the sick list. It looked like our program was headed for the rocks. But these handicaps did not dampen this man's ardor. He said from the beginning he had never been defeated and he wasn't going to take a licking now.

Gentlemen, he knew what he was talking about. As Al Smith says, take a look at the record.

Dr. Christian, the Officers and Council of the Michigan State Medical Society are cognizant of what you have done, this House of Delegates is very grateful to you for your efforts, the people of Michigan are forever indebted to you, and on behalf of the Michigan State Medical Society, I wish to present to you this scroll:

LEO G. CHRISTIAN, M.D.

In recognition of his service to Humanity and to Medicine.

Michigan State Medical Society,

Henry E. Perry, M.D., President,

L. Fernald Foster, M.D., Secretary.

September 17, 1937.

(Applause)

DR. L. G. CHRISTIAN (Ingham): In accepting this I do it with a great deal of humility. If our legislative program was a success, it is due to many factors. First, because the individual doctor, the member of this Society, was determined that we were going to have a hearing in the legislature. The officers of the county medical societies, their policy committees and their legislative committees, are a bunch of energetic fellows who never let us down. Every request that we sent to them they fulfilled. As for the Council and State Society and Executive Committee, we never went to them with a request, for which we had good reason, that they didn't approve. Dr. J. B. Bradley of Eaton Rapids is 80 years old. He was our adviser. Through the years, he has been mixed up more or less in politics. He knows the legislature. The hour was dark, we were in a crisis, so old Jim Bradley came to Lansing and spent one, two or three days getting us out of our mess. You all know what Dr. Henry E. Perry has done. He moved in at Lansing during the session and stayed there until they were ready to go home. He taught these people by his very action and by word the idealism of the medical practitioner of Michigan.

Now we are coming down to my own committee. The Legislative Committee was unanimous in all its decisions as to policy. Finally, there were some expert political contacts that I was fortunate enough

to make, and they became medicine's contacts. It is those men, elected and appointive officers of the state government, that I want to thank for their advice, for their counsel, for getting us out of the jams. I feel this so strongly that the only way I can repay them is to personally support them should they ever run for reelection.

All of that background would have been absolutely of no avail if we had not had Bill Burns, this Bill Burns, in Lansing. Bill Burns has gone to two sessions of the legislature. He has arrived. He knows his business. I am not alone in saying this. In Lansing, there are probably twenty men, public relations men, who are watching the legislative interests for their employers, whether they be railroads, boards of education, motor car manufacturers, or what-not. Those men we again relied upon. They were friends of ours and friends of medicine. Those men were unanimous in their decision and in their opinion that Bill Burns has arrived. Three of the most astute politicians in the state government personally informed me that, with proper support from us all, Bill Burns can take care of our legislation in a satisfactory manner in the years to come. This isn't a eulogy of Bill Burns. It is a plea to the Council and House of Delegates not to depend upon the doctor of medicine, not to ask him to do this political contact work. No doctor of medicine can afford it. We have no right to ask any man to give up \$2,000 of his money that is lost in his practice to do this work. Nor should we have to do it.

You men of Wayne who are acquainted with Bill and worked with him and saw him, know what he can do. I worked with him for five or six months. There was no task that was too hard, no hour that was too long, and there was nothing that was too tough for Bill to tackle. He was our contact man last time and he should be our representative in the future.

My impression of the future Legislative Committee of the Michigan State Medical Society is that it should be along this line: the committee should formulate the policy of legislation; then, after it has been approved by The Council, they should hand it to Bill. The technique of legislation should not interest us. The time of introduction, the interviewing of committees and governmental officials connected with the piece of legislation, and also the entire legislative body, should be under his management.

I can't say it too much and I can't say too strongly that we are fortunate in bringing a man of that type into our employ. I feel that since Bill Burns knows the legislature and they know whom he represents, we should contact that legislature through our representative.

I will say this: If we do that and if we give Bill Burns the support that you gave our committee, this time medicine is in safe hands in Lansing. Thank you, gentlemen. I shall keep this as a treasure. (Applause)

THE SPEAKER: Are there any other resolutions? The Chair will recognize Dr. O'Meara.

3. EMERITUS AND RETIRED MEMBERSHIPS

DR. J. J. O'MEARA (Jackson): I should like to propose for emeritus membership, Dr. A. J. Roberts. He is seventy-seven years of age and has practiced medicine in the city of Jackson and throughout our territory for fifty-two years.

I should also like to propose for emeritus membership the name of Dr. J. C. Kugler, seventy-six years of age, who has been practicing medicine around about Jackson for fifty-one years. I should also like to propose for emeritus membership the name of

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Dr. D. W. Fenton, of Hillsdale, a man eighty-six years of age, in the practice of medicine for sixty-two years.

THE SPEAKER: Do you offer that as a resolution?

DR. J. J. O'MEARA (Jackson): I offer that as a resolution.

THE SPEAKER: That will be referred to the Reference Committee on Resolutions.

The Chair desires to recognize Dr. Keyport.

DR. C. R. KEYPORT (O.M.C.O.R.O.): Mr. Speaker and Members of the House of Delegates: This is a resolution from the O.M.C.O.R.O. County Medical Society.

Petition

Petition to the members of the House of Delegates of the Michigan State Medical Society from the members of the O.M.C.O.R.O., September 27, 1937.

WHEREAS—Dr. Levi Harris of Gaylord, Michigan, has been active in the practice of medicine for the past fifty-three years, having graduated in 1884, and

WHEREAS—Dr. Harris has been a member in good standing in the O.M.C.O.R.O. County Medical Society and the Michigan State Medical Society since 1905—therefore

We, the members of the O.M.C.O.R.O., petition the members of the House of Delegates of the Michigan State Medical Society to confer upon Dr. Levi Harris the honor of Member Emeritus in the Michigan State Medical Society.

THE SPEAKER: You offer that as a motion?

DR. KEYPORT: Yes, sir.

THE SPEAKER: That will be referred to the Reference Committee on Resolutions.

I recognize Dr. Penberthy.

Resolution

Upon recommendation of The Council of the Wayne County Medical Society, we respectfully submit to the House of Delegates of the Michigan State Medical Society the following two names for candidates as Members Emeritus of the State Society of Affiliate Fellows of the American Medical Association. The requirements of the By-Laws of the Wayne County Medical Society and Michigan State Medical Society with reference to Emeritus Membership have been met in these cases.

Dr. O. S. Armstrong has been engaged in the active practice of medicine for sixty years. He was born in Glen Allan, Ontario, in 1851, graduated from the University of Michigan in 1877, and established practice immediately after graduation in the City of Detroit. Dr. Armstrong is the oldest living Past President of the Wayne County Medical Society. He has been a member of the W.C.M.S. ever since his graduation in 1877 and became a member of the State Society and the American Medical Association a few years later. In recognition of his long period of service Dr. Armstrong was made an Honor Member of the Wayne County Medical Society December 17, 1928.

Dr. W. R. Chittick has been engaged in the active practice of medicine for fifty-five years. He was born in Ontario in 1858, graduated from the Long Island College of Medicine in 1882. Dr. Chittick was made an Honor Member of the Wayne County Medical Society, October 19, 1926. He has been a member of the Michigan State Medical Society and the American Medical Association since 1906, a period of thirty-one years.

GROVER C. PENBERTHY, M.D.

THE SPEAKER: It is referred to the Reference Committee on Resolutions. May I remind the committee to read the By-Laws and see what the requirements are for membership in these four dif-

ferent classes, associate, retired, honorary, and emeritus. They should see that these fit properly into the membership picture. Are there any other resolutions?

DR. L. G. CHRISTIAN (Ingham): I wish to present for emeritus membership the name of Dr. Alfred L. Arnold, of Owosso, age eighty years, graduated in medicine fifty-one years ago. He has been a member of Shiawassee Medical Society since its organization. He has been active in civic and medical affairs. His father was president of Shiawassee County.

THE SPEAKER: It is referred to the Reference Committee on Resolutions.

DR. ALFRED LABINE (Houghton): We don't write about our men. We will give you their names. I propose them for this honor, emeritus membership. Dr. R. J. Maas, who over fifty years ago was the physician for the Franklin Quincy Mining Company. He is from Houghton, Michigan.

We should also like to mention Dr. W. P. Scott, who sixty years ago was the first mine physician on Isle Royale.

THE SPEAKER: They are referred to the Reference Committee on Resolutions.

DR. S. C. MASON (Menominee): I wish to present the name of Dr. Edward Sawbridge of Stephenson for emeritus membership in the State Society.

Resolution

At a meeting of the Menominee County Medical Society, September 22, 1937, at Hotel Menominee, the following resolution was made.

RESOLVED, that the name of Dr. Edward Sawbridge of Stephenson be proposed for emeritus membership in the State Society.

He graduated from Rush, February, 1883, and located at Stephenson, November, 1883.

He has served his County Medical Society as President and has always given of himself unselfishly to professional and civic enterprise. He has served as Menominee County Trustee on the Board of Pinecrest Sanatorium at Powers, from the inception of the idea to the present time, during which period it has grown from a two-county to a four-county institution.

He has been a credit to his profession and has practiced for over fifty-three years in Michigan.

THE SPEAKER: It is referred to the Reference Committee on Resolutions.

DR. WM. C. ELLET (Berrien): Mr. Speaker, I have a petition here.

Resolution

To The House of Delegates, Michigan State Medical Society 1937 meeting, Grand Rapids, Michigan.

The Berrien County Medical Society herewith send their greetings to the House of Delegates of the Michigan State Medical Society, and ask for the consideration of the following Resolution, adopted at the August meeting of the Berrien County Society held at Benton Harbor.

BE IT HEREBY RESOLVED, That the Delegate of the Berrien County Medical Society to the Michigan State Medical Society be hereby requested to present the name of a member of our society, for that of a Retired Member (according to Section V, Article III of the Constitution).

This man has been a member of the Berrien County Medical Society for forty years, one time Secretary, Delegate, and President, always an active member, deeply interested in the aims of his County Society, always keeping the interest of his colleagues and the profession as one of primary consideration.

THEREFORE, We present to you the name of Edward J. Witt for a Retired Member of the Michigan

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State Medical Society, and the Berrien County Medical Society.

We hereby request that his name be inscribed on the rolls of the State Society as such a member.

(Signed),

BERRIEN COUNTY MEDICAL SOCIETY

By the Secretary,

A. F. BLIESMER.

Resolution

To The House of Delegates, Michigan State Medical Society 1937 meeting, Grand Rapids, Michigan.

The Berrien County Medical Society herewith send their greetings to the House of Delegates of the Michigan State Medical Society, and ask for the consideration of the following Resolution, adopted at the August meeting of the Berrien County Society held at Benton Harbor.

BE IT HEREBY RESOLVED, That the Delegate of the Berrien County Medical Society to the Michigan State Medical Society be hereby requested to present the name of a member of our society, for that of a Member Emeritus (according to Section VI, Article III of the Constitution.)

This man graduated from the University of Michigan in 1886, locating in Niles, Michigan, as a practitioner of Medicine, later specializing in diseases of the eye, a pioneer in this specialty in the State of Michigan, a member of his County Society for over thirty years, holding the respect of his colleagues in this society, and having an extensive practice with the resultant appreciation of thousands of patients, and carrying on to the best of his ability his ideas of the practice of his specialty;

BE IT THEREFORE RESOLVED, That the Berrien County Society present to the Michigan State Medical Society the name of Dr. Fred N. Bonine as Member Emeritus.

We hereby request that his name be inscribed on the rolls of the State Society, as such a member.

(Signed),

BERRIEN COUNTY MEDICAL SOCIETY

By the Secretary,

A. F. BLIESMER.

DR. J. M. ROBB (Wayne): I didn't know Dr. Bonine was a member of the State Society and I must admit that at the present time I am confused as to whether to support the thing or not without a little discussion.

THE SPEAKER: The matter is open for discussion.

DR. CARL F. SNAPP (Kent): May I ask a question? Is the man a member in good standing in the Berrien County Society?

DR. WM. C. ELLET (Berrien): He is, doctor, and has been for years.

DR. ROBB: Of the State Society?

DR. ELLET: He must be.

THE SPEAKER: Your information was thirty years?

DR. ELLET: All the information I have was presented by my Councilor. I present that to you.

THE SPEAKER: You were presented with that information by the officers of the society?

DR. ELLET: Yes, sir.

THE SPEAKER: By your president and secretary?

DR. ELLET: The resolution is signed by the secretary.

DR. E. D. SPALDING (Wayne): Point of information. Is the only requisite for emeritus membership the holding of membership in the Society for a certain number of years?

THE SPEAKER: Is there any further discussion of this resolution?

DR. P. L. LEDWIDGE (Wayne): I should like to have one point of information.

DR. SPALDING: I rose on a point of information.

THE SPEAKER: Will you raise your point again?

DR. SPALDING: I asked whether the only requirement for emeritus membership is simply the length of membership in the State Society. Is that sufficient?

THE SPEAKER: Will the Secretary inform the gentleman?

THE SECRETARY: That is emeritus, Dr. Spalding? Any physician who has been in practice for fifty years and who has maintained a membership in good standing for twenty-five years may upon application or recommendation of the county society become an emeritus member.

DR. SPALDING: It says he may. It doesn't say he shall.

THE SPEAKER: Your vote would determine that, if I can answer you there. Just because he is eligible doesn't mean that he might be elected.

DR. P. L. LEDWIDGE (Wayne): Point of information. If this name is passed upon favorably by the Committee on Resolutions, does that mean that we have to accept him?

THE SPEAKER: No.

DR. LEDWIDGE: There is a chance for discussion at that time?

THE SPEAKER: There is. Is there any further discussion? Ready for the question as to whether this shall go to the Committee on Resolutions or not?

DR. WM. C. ELLET (Berrien): There were two separate resolutions.

THE SPEAKER: We shall vote on these separately. Will the Secretary read the first name?

THE SECRETARY: The first one is for retired membership, and the name is that of Dr. Edward J. Witt.

THE SPEAKER: Will you read the details about him again?

THE SECRETARY: "This man has been a member of the Berrien County Medical Society for forty years, one time Secretary, Delegate, and President, always an active member, deeply interested in the aims of his County Society, always keeping the interest of his colleagues, and the profession, as one of primary consideration."

THE SPEAKER: Will Dr. Ellet make a motion individually on this case?

DR. WM. C. ELLET (Berrien): I believe I already have made that motion.

THE SPEAKER: Individually?

DR. ELLET: Yes, sir.

THE SPEAKER: You made it collectively on the two.

DR. ELLET: I offered the two resolutions.

THE SPEAKER: You did?

DR. ELLET: Yes.

THE SPEAKER: Is the motion seconded?

The motion was regularly seconded.

THE SPEAKER: Is there any discussion?

DR. E. D. SPALDING (Wayne): I rise to a point of order in voting on this thing.

On Page 101 it says: "All resolutions introduced into the House shall be in duplicate and presented to the Secretary immediately after the delegate has read the same and shall be referred to the proper committee by the Speaker before action thereon is taken."

THE SPEAKER: Therefore, we don't need to vote on these. So I see. We vote on them after they come back from the Reference Committee on Resolutions. The House will accept that. We need not vote any further on these resolutions. We simply refer them to the Committee on Resolutions. There-

fore, this will be referred to the Reference Committee on Resolutions. Are there any further resolutions?

4. COMMITTEE ON DISTRIBUTION OF MEDICAL CARE (BY-LAWS AMENDMENT)

DR. R. H. PINO (Wayne): I have a few resolutions I wish to submit.

Resolution

WHEREAS, The duties of the Economics Committee of the Michigan State Medical Society are concerned largely with the problems of the distribution of medical care; and

WHEREAS, The Economic aspects of medical care, while essential, are not the prime objectives in the distribution of medical care; and

WHEREAS, Emphasis on the word economics in connection with medical society activities conveys to the public a wrong emphasis and a tendency to misunderstanding of the true objectives of the Society; and

WHEREAS, The term "distribution of medical care" is definitely more comprehensive and sets forth the functions of the Committee more adequately;

BE IT RESOLVED, That Chapter 6, Section 3 of the By-laws of the Michigan State Medical Society be changed to read, "The Committee on the Distribution of Medical Care," in lieu of "Committee on Medical Economics."

DR. PINO: Then I should like to present another resolution.

5. MORALS

Resolution

WHEREAS, One of the most serious problems confronting our people is that of crime and criminal tendencies among our youth; and

WHEREAS, Sex crime constitutes so large a proportion that the Federal Bureau of Investigation headed by J. Edgar Hoover is soliciting aid from every responsible source; and

WHEREAS, The drug marihuana which seriously affects the emotional level of individuals is rapidly increasing in production and consumption to the extent that it has become a serious problem to the Federal Bureau of Narcotics; and

WHEREAS, We also recognize the detrimental effects of certain pictures and programs on the screen, and in magazines produced for public consumption and seemingly not adequately censored from the standpoint of mental hygiene; and

WHEREAS, Untiring efforts are being put forth by leading newspapers, organizations concerned with mental hygiene and other interested groups in the solution of these problems; and

WHEREAS, This is a problem of preventive medicine; therefore

BE IT RESOLVED, That the Michigan State Medical Society go on record in support of these efforts and that copies of this resolution be sent to such organizations as are concerned.

THE SPEAKER: You offer two resolutions. The first resolution will be referred to the Reference Committee on Amendments to Constitution and By-Laws. The second will be referred to the Reference Committee on Resolutions. Are there other resolutions?

3. EMERITUS MEMBERSHIP

DR. O. G. JOHNSON (Tuscola): I present a resolution asking for emeritus membership for Dr. John Handy of Caro, eighty years of age, with fifty years of practice, and he has been active in his county society for thirty years. I should like to have this confirmed by members of the Society.

THE SPEAKER: It is referred to the Reference Committee on Resolutions.

The Chair recognizes Dr. Robb, of Wayne.

6. DUTIES OF THE PRESIDENT (BY-LAWS AMENDMENT)

DR. J. M. ROBB (Wayne): Dr. Henry Luce will be nominated for President and I believe that he will be elected. In order to have him satisfactorily accept the nomination, I ask that this resolution be presented to the House of Delegates.

Resolution

WHEREAS, Chapter IV, of the By-Laws of the Michigan State Medical Society entitled "Duties of Officers" provided in Section 1 that

"The President shall preside at all General Meetings of the Society, and shall fill all vacancies in offices and committees in consultation with the Council unless otherwise provided for; he shall appoint the members of all committees not otherwise provided for; he shall deliver the President's address and shall as far as practicable visit component county societies during his tenure of office; he shall have a voice in the deliberations of the House of Delegates and he shall be an ex-officio member of the Council."

and

WHEREAS, Experience and precedent show that a conscientious man elected to this responsible position of President accepts the above By-law as a mandate to actually call personally on the fifty-four component county societies in this State; and

WHEREAS, The general activities of the organization have grown to a degree requiring the President to devote the major portion of his time during tenure of office to the multiple and vital affairs of the Society; and

WHEREAS, The presidency of this Society is an honorary recognition usually bestowed on one who already has given distinguished service to organized medicine, and who should not be called upon to shoulder further arduous tasks and responsibilities demanding additional time and energy; and

WHEREAS, It is expressly provided in the By-laws that other officers of the Society, specifically the Secretary and the Councillors in the various districts, shall integrate county society activities and visit these component units regularly, therefore; be it

RESOLVED, That Chapter IV, Section 1, of the By-laws of the Michigan State Medical Society be amended by deleting from the duties of President the following clause: "and shall as far as practicable visit component county societies during his tenure of office."

J. M. ROBB, M.D.,
Wayne County.

THE SPEAKER: The resolution will go to the Reference Committee on Amendments to Constitution and By-Laws.

7. DUTIES OF THE COUNCILORS (BY-LAWS AMENDMENTS)

DR. O. D. STRYKER (Newaygo): I wish to present the following resolution:

I move the following amendment to the By-Laws of the Constitution of the Michigan State Medical Society:

"That Chapter Five (5) Section Two (2) shall be deleted and a new Section, known as Chapter Five (5) Section Two (2), be adopted to read as follows:

"Each Councilor shall be the organizer, peace maker, and censor for his District. He shall visit each Society in his District at least twice a year and keep in touch with the activities of these societies constituting his District. He shall make such reports to the Chairman of the Council as requested by him imparting the condition of the profession in that District.

"Section Three (3). Upon written statement,

signed by at least half of the Delegates of the Councilor District, or by the Chairman of the Council, setting forth that the Councilor of that District has failed to perform his duties as prescribed above, and presented to the Speaker of the House of Delegates, the Speaker shall appoint an investigating Committee of three (3) Delegates from one or more other Districts. Upon a confirmatory report the Speaker shall declare the office of Councilor in that District vacant. The then President of the Michigan State Medical Society shall immediately appoint a Councilor to act until the next Regular Session of the House of Delegates, at which time a successor shall be elected to fill the unexpired part of the term of the Councilor so removed.

"Present Section Three (3) shall be changed to read Section Four (4) and succeeding Sections numbered in consecutive order."

THE SPEAKER: That resolution will be referred to the Reference Committee on Amendments to Constitution and By-Laws.

DR. CARL F. SNAPP (Kent): The delegates of Kent County Medical Society asked me to present this resolution.

8. PHYSICIANS' FEES—FIRST CLASS LIEN

Resolution

WHEREAS: A present physicians' and nurses' fees for services rendered in the last illness of all cases are considered as second class and frequently as third class claims by the Probate Court, and;

WHEREAS: Such classification of said claims renders an unfair hardship upon the professions, therefore

BE IT RESOLVED, That the Legislative Committee of this body be instructed to use its power and influence to have enacted at the next session of the State Legislature a bill making physicians' and nurses' fees for services rendered in the last illness first class claims.

THE SPEAKER: That will be referred to the Reference Committee on Resolutions. Are there any other resolutions?

DR. T. K. GRUBER (Wayne): I have one resolution.

9. STUDY OF TERMINOLOGY IN GROUP HOSPITALIZATION

Resolution

WHEREAS: Group Hospital Service (Group Hospital Insurance) is a pertinent issue at the present time, and

WHEREAS; the proper understanding of the definition of Hospital Service and Medical Service has not been reached to the satisfaction of the Michigan State Medical Society, and

WHEREAS; it is the unalterable opinion of the Michigan State Medical Society that Medical Service shall be at all times divorced from Hospital Service.

BE IT RESOLVED: That the President of the Michigan State Medical Society be empowered to appoint a committee of three (3) to confer with all interested groups in order that there may be a proper understanding of the terms Hospital Service and Medical Service, and

BE IT FURTHER RESOLVED: that this Committee be instructed to submit a full and complete report to the House of Delegates of the Michigan State Medical Society at the Annual Session of this body in 1938.

J. MILTON ROBB.
T. K. GRUBER.
C. K. HASLEY.

DR. GRUBER: It comes as a recommendation from Wayne County Medical Society and we ask that it be referred to the Resolutions Committee.

THE SPEAKER: It is referred to the Reference Committee on Resolutions. The Chair recognizes Dr. Umphrey.

10. FEES FOR MEDICAL INFORMATION IN INSURANCE CASES

DR. C. E. UMPHREY (Wayne): In 1929 the Michigan State Medical Society adopted several resolutions. At that time they adopted a resolution that the doctors should be paid by insurance companies for services rendered. Inasmuch as very few of the insurance companies have been doing it and inasmuch as perhaps only one per cent of the doctors know about this, I offer the following resolution.

Resolution

WHEREAS, the House of Delegates of the Michigan State Medical Society at its annual meeting in Jackson, September, 1929, adopted two resolutions calling for physician's fees of not less than \$2.00 for filling out certain insurance forms, and

WHEREAS, the members of the profession in Wayne County are heartily in accord with the principle and intent of those resolutions and are attempting to put them into effect, and

WHEREAS, a certain amount of difficulty and confusion exist regarding the exact scope of those resolutions, and services they comprehend, and the best method of enforcing them, therefore be it

RESOLVED, that the House of Delegates of the Michigan State Medical Society in convention assembled again discuss the subject matter of those resolutions with the object of clarifying them and possibly adding to the past action of the House of Delegates in such manner as to be of aid to the general practitioner of medicine in complying with the aforementioned resolutions and be it further

RESOLVED, that the insurance companies involved be advised of any new action taken by this House of Delegates on the subject.

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions. Are there others?

11. INSPECTORS FOR STATE BOARD OF REGISTRATION IN MEDICINE

DR. ROY C. PERKINS (Bay): Mr. Speaker and Gentlemen: We have a situation in our district which is not singular to our district alone. It is a situation which was mentioned by the Speaker this morning in his address, particularly with regard to the irregular practice of medicine, and I have this resolution, therefore, to offer.

Resolution

To the House of Delegates Michigan State Medical Society:

WHEREAS, certain violations of the Medical Practice Act are in evidence in several counties of the State, and

WHEREAS, to begin suit in such cases warrants must be signed and presented to the local prosecutor, and

WHEREAS, it is not practical or advisable for members of the medical profession to sign such warrants,

THEREFORE, BE IT RESOLVED, that the Council of the Michigan State Medical Society immediately use its influence to secure for the Board of Registration an inspector whose duties it shall be to investigate and make charges against violators of the Medical Practice Act.

Presented by Dr. Roy C. Perkins, Delegate from Bay City.

THE SPEAKER: This resolution will also be referred to the Reference Committee on Resolutions. Are there others? I recognize Dr. Arnold, of Owosso.

12. STUDY OF REQUIREMENTS FOR NURSES' TRAINING SCHOOLS

WHEREAS; there is definite shortage of nurses throughout the State, and

WHEREAS; in many hospitals it is impossible to supply adequate nursing care to patients, and

WHEREAS; many hospitals are desirous of re-establishing their nursing schools, and

WHEREAS; the present requirements are so rigorous that it is economically impossible for the smaller hospitals to do this,

BE IT RESOLVED; that it is the opinion of the Michigan State Medical Society that the Michigan State Board of Registration of Nurses should study this question and attempt to solve this situation by somewhat modifying their present requirements.

THE SPEAKER: The resolution will be referred to the Reference Committee on Resolutions. Are there others?

The Vice Speaker assumed the chair.

XII. NEW BUSINESS

THE VICE SPEAKER: Is there anything coming under the head of new business?

1. INVITATION TO A.M.A. TO MEET IN DETROIT

DR. L. J. HIRSCHMAN (Wayne): The Wayne County Medical Society is going to extend an invitation to the American Medical Association to hold its 1939, 1940 or 1941 meeting at Detroit. Therefore, I should like to move that the House of Delegates instruct the delegates from Michigan to cooperate with the Wayne County Medical Society in extending the invitation of the Wayne Medical Society and the Michigan State Medical Society to the American Medical Association to meet here in 1939, 1940 or 1941.

DR. J. M. ROBB (Wayne): Second the motion.

The motion was put to a vote and carried.

THE VICE SPEAKER: We have a letter which we should like to have the Secretary read.

2. LETTER FROM DR. F. C. WARNSHUIS

The Secretary read a communication from Dr. F. C. Warnshuis, Secretary of the California State Medical Association, dated September 24, 1937, addressed to the Speaker of the House of Delegates.

DR. H. A. LUCE (Wayne): I move that the Secretary of this Society send a telegram to Dr. Warnshuis, acknowledging the receipt of this communication and expressing our regard and good wishes for the California State Medical Association.

DR. CARL SNAPP (Kent): Second it.

The motion was put to a vote and carried.

THE VICE SPEAKER: Is there anything else under the head of new business?

3. EMERITUS MEMBERSHIP FOR DR. A. M. HUME

DR. A. L. ARNOLD, JR. (Shiawassee): Dr. A. M. Hume of Owosso, an honorary member of the Michigan State Medical Society, wishes to have his status changed to that of active member again. We carried him in Shiawassee County but we didn't suppose it was necessary, but I understand something is necessary here. I move that the necessary action be taken.

DR. J. M. ROBB (Wayne): Second that motion.

DR. COOK: I should like to explain this. This doctor, whom you elected to emeritus membership, took care of my mother when I was born. He is known to all the boys in Shiawassee. He has had the feeling that honorary membership is a superannuated membership and he objects to having his right to vote and hold office taken away from him. He is a Past President of this Society, as you know, but he feels that he has been robbed of something.

DR. ARNOLD: Dr. Hume feels if he were made an

emeritus member as well as honorary member he might still have the right to vote and hold office. You might take him and put him on the emeritus basis. That would be fine.

DR. COOK: According to the By-Laws, "any physician who has been in practice for fifty years, and who has maintained a membership in good standing for twenty-five years, may, upon application and recommendation of his County Society, become a Member Emeritus. A Member Emeritus shall be relieved from paying State Dues. He shall be entitled to all the benefits and privileges of memberships."

That would please him, I think, more than anything else. That is what he is after. It is still showing him that honor. Honorary membership doesn't give him the right to hold office in the county society, but this would give it to him.

DR. A. L. ARNOLD, JR. (Shiawassee): That would be fine.

THE VICE SPEAKER: The motion was made and supported. Are there any further questions?

The motion was put to a vote and carried.

XIII. REPORTS OF REFERENCE COMMITTEES

THE VICE SPEAKER: Is there anything else coming up under the head of new business? If not, we shall pass to the reports of Reference Committees. The first one is from the Chairman of the Reference Committee on Officers' Reports, Dr. Brasie.

XIII (1). REFERENCE COMMITTEE ON OFFICERS' REPORTS

SPEAKER'S ADDRESS (III)

PRESIDENT'S ADDRESS (IV)

PRESIDENT-ELECT'S ADDRESS (V)

Your reference committee on Officers' Reports met at noon today.

SPEAKER'S ADDRESS:

Your committee wishes to heartily endorse this forward looking address, and strongly urge every member of this organization to study carefully its suggestions. Particularly we desire to stress his recommendation that the State Board of Registration be supplied with sufficient funds to "properly investigate irregular practices within our own ranks."

PRESIDENT'S ADDRESS:

Dr. H. E. Perry's contribution to the physicians of this state has been one which shall long be remembered. His untiring and diligent efforts are well summarized in his excellent address read to us by Executive Secretary William Burns.

PRESIDENT-ELECT'S ADDRESS:

The address of the President-Elect, Dr. Henry Cook, contains a comprehensive program for the ensuing year. This we endorse and support. We wish to re-emphasize his recommendations for the re-distribution and lessening of the burden of work placed upon the president's shoulders, as an especially pertinent matter for the State Society to deal with at the present meeting.

Committee: DONALD R. BRASIE, M.D.; H. C. HANSEN, M.D.; A. E. CATHERWOOD, M.D.; R. C. PERKINS, M.D.; and RALPH G. COOK, M.D.

DR. DONALD R. BRASIE (Genesee): Mr. Speaker, I move we adopt the report of the Committee on Officers' Reports.

The motion was regularly seconded, was put to a vote and carried.

XIII (2). REFERENCE COMMITTEE ON ANNUAL REPORT OF THE COUNCIL (VI)

THE VICE SPEAKER: The Chairman of the Reference Committee on Reports of the Council, Dr. Pino.

Your Reference Committee on the Report of the council has noted carefully the contents of that report. If your Committee were to report adequately,

it would require a statement by about twelve subcommittees for the reason that the report comprises twelve statements of activities each of which is of vital importance to the medical profession of Michigan. For the extensive amount of valuable time which the council has devoted, time which if paid for would run into many thousands of dollars, your Reference Committee can only report back what we believe would be unanimous from our entire membership, our sincere thanks.

The Reference Committee concurs in the report with only the following comment:

1. *Finance.* In view of the necessarily increased activities together with the necessarily attendant increased cost we believe The Council is wise in giving consideration to the increase of dues in order that the work of the Society may not be curtailed.

2. *The Journal.* We wish to report the unanimous opinion that THE JOURNAL speaks for itself. It is splendid.

3. *Postgraduate Activities.* Your Reference Committee believes that every encouragement should be given to the postgraduate report suggestion and with special reference to the endowment fund. We feel that the efforts being given by all concerned under the direction of Dr. J. D. Bruce and Dr. H. H. Cummings provide opportunity rare in the history of state medical societies. We believe that the House of Delegates should take cognizance of this offer of endowment in order that so important a postgraduate program may be perpetuated.

4. *Annual Meeting.* Considerable disappointment has been expressed that it seemed necessary to eliminate the scientific exhibit this year.

Respectfully submitted,

Committee: RALPH H. PINO, M.D., *Chairman*; G. H. YEO, M.D.; E. O. FOSS, M.D.; C. T. EKELUND, M.D.; DEAN W. MYERS, M.D.; T. K. GRUBER, M.D.; WM. S. REVENO, M.D.; O. D. STRYKER, M.D.; R. C. JAMIESON, M.D.

DR. RALPH H. PINO (Wayne): Mr. Speaker, I move acceptance and adoption of this report.

DR. HARVEY C. HANSEN (Calhoun): I second it. The motion was put to a vote and carried.

XIII (3). REFERENCE COMMITTEE ON REPORTS OF STANDING COMMITTEES (VII AND VIII)

THE VICE SPEAKER: We will now hear from the Chairman of the Reference Committee on Reports of Standing Committees, Dr. Insley.

DR. STANLEY INSLEY (Wayne): Mr. Speaker and Members of the House of Delegates: We have nine various standing committees on which to report. We will take them up as listed in the book.

XIII (3a). REFERENCE COMMITTEE ON LEGISLATIVE COMMITTEE REPORT [VIII (1)]

Your committee wishes to recommend the acceptance of the report of the Committee on Legislation. Mr. Chairman, I so move.

DR. J. M. ROBB (Wayne): Second.

The motion was put to a vote and carried.

XIII (3b). REFERENCE COMMITTEE ON ADVISORY COMMITTEE ON GROUP HOSPITALIZATION [VIII (1a)]

DR. INSLEY: The next has to do with the report of the Advisory Committee on Group Hospitalization, a subcommittee of the Legislative Committee. Your Reference Committee recommends the acceptance of this printed report. Mr. Chairman, I so move.

DR. WM. J. STAPLETON (Wayne): Second.

The motion was put to a vote and carried.

XIII (3c). REFERENCE COMMITTEE ON JOINT COMMITTEE ON HEALTH EDUCATION [VIII (2)]

DR. INSLEY: The next we have to report on is the Joint Committee on Health Education. Your Refer-

ence Committee recommends acceptance of this report and, Mr. Chairman, I so move.

The motion was regularly seconded, was put to a vote and carried.

XIII (3d). REFERENCE COMMITTEE ON COMMITTEE ON MEDICAL ECONOMICS [VIII (3)]

DR. INSLEY: We have next to deal with the Committee on Medical Economics. Your Reference Committee recommends acceptance of the printed report. Mr. Chairman, I so move.

DR. HARVEY C. HANSEN (Calhoun): Second.

The motion was put to a vote and carried.

XIII (3e). REFERENCE COMMITTEE ON CANCER COMMITTEE [VIII (4)]

DR. INSLEY: The next has to do with the report of the Cancer Committee. Your Reference Committee recommends acceptance of this report. Mr. Chairman, I so move.

DR. ALFRED LABINE (Houghton): Second the motion.

The motion was put to a vote and carried.

XIII (3f). REFERENCE COMMITTEE ON COMMITTEE ON PREVENTIVE MEDICINE AND ITS ADVISORY COMMITTEE ON SYPHILIS CONTROL [VIII (5) AND VIII (5a)]

DR. INSLEY: The next has to do with the report of the Committee on Preventive Medicine and its subcommittee on syphilis control. Your Reference Committee recommends the acceptance of the printed reports with an added suggestion that in view of new legislation the studies be continued and that in the further study any laboratory work involved should be considered as professional services. Mr. Chairman, I so move.

The motion was regularly seconded, was put to a vote and carried.

XIII (3g). REFERENCE COMMITTEE ON COMMITTEE ON POSTGRADUATE MEDICAL EDUCATION [VIII (6)]

DR. INSLEY: We have next to deal with the report of the Committee on Postgraduate Medical Education. Your Reference Committee recommends acceptance of the printed report and suggests a future policy of issuing certificates of attendance only to those physicians who are members of the A.M.A. We further recommend that the Committee on Postgraduate Medical Education give careful thought to the form of the wording on the certificate which will be issued. We suggest that the certificate bear the name of the Michigan State Medical Society in conjunction with the University of Michigan and Wayne University, so that the Society's position may be perfectly understood. Mr. Chairman, I so move.

The motion was regularly seconded.

DR. L. J. HIRSCHMAN (Wayne): May I discuss this report? I am heartily in favor of the recommendations of the Postgraduate Committee, particularly the recommendation made by the committee that care be used in issuing certificates to men who are members of the American Medical Association, which includes those men who come from outside the state of Michigan, but there is a further admonition which I think should be given to this committee. That is to exercise extreme care in regard to physicians who may register to take these courses. In the past, on account of the press of business, the registration has been allowed to be cared for by a non-medical registrar and several irregular practitioners of medicine have been allowed to register in postgraduate courses given under auspices of the Michigan State Medical Society. Men have been allowed to register for various courses who are absolutely not eligible to membership.

I would therefore move, sir, that the committee report be amended so as to include an admonition to

the committee not to admit for registration in any postgraduate course sponsored by the Michigan State Medical Society any member of the medical profession or any other profession who is not eligible for membership in an organized state medical society.

The amendment was regularly seconded.

DR. J. M. ROBB (Wayne): I concur with every thing Dr. Hirschman has said in this matter. I have not the slightest objection to giving a man who is properly qualified a certificate, but it is extremely difficult to estimate at the time they come to you whether they actually are members of the society or not. I think in the amendment it should be stated that rather than not be admitted to the course they do not be given certificates. They have gone through my hands a couple of times as Dr. So-and-so. It is not easy at the time to actually find out all the technicalities unless we carefully look into it. Personally I would much sooner see Dr. Hirschman's amendment carried out. It is not as easy as it looks, but certainly from the standpoint of giving certificates every man who gets a certificate must have a careful analysis of his background made.

THE VICE SPEAKER: Is there any further discussion on the amendment?

DR. L. J. HIRSCHMAN (Wayne): May I state that while I concur with Dr. Robb that anyone ineligible should not receive a certificate, that is the wrong time to cull them out. I believe more study should be given to applicants who are to join these classes and not let such people in at all. I think that the authorities in the University of Michigan and Wayne University would be very careful about admitting students to their undergraduate classes and I know that our medical societies are supposed to be very careful about those we admit to membership. It is an extremely important thing that no physician who is ineligible be allowed to take part in any course of instruction under the auspices of the Michigan State Medical Society. I insist on scrutiny of the application before they are even taken into the class.

THE VICE SPEAKER: You could in your amendment ask that the man be certified by his county society before taking the course.

DR. H. L. CLARK (Wayne): In the discussion on this report this morning it was brought out that they didn't wish to limit the entrance of non-members of the Michigan State Medical Society to these courses because very often after joining the course they became members of the Society. In other words, it served to bring them into the Society. On the other hand, on the registration card which they fill out before being admitted to the course the question may be asked, "Of what medical school are you a graduate?" That would serve to tell you exactly whether they were eligible.

DR. P. L. LEDWIDGE (Wayne): I wonder if we are justified in taking what Dr. Clark suggests. I think you should limit it to perhaps two classes, those who are members of their state or county medical societies or those who have put in applications and are eligible, at least eligible. That could be very easily certified by the county society.

THE VICE SPEAKER: Dr. Hirschman, would you restate your amendment?

DR. L. J. HIRSCHMAN (Wayne): I move, sir, that the report of the Reference Committee be amended so that the committee on Postgraduate Medical Education is instructed to require evidence from every applicant for instruction in any course as to his membership in his state or county society and also as to his eligibility for membership in such society. That would include them all. He may be eligible and still doesn't care to join. He should be allowed to take the course.

DR. INSLEY: Dr. Hirschman, in the report as

worded or as discussed it was brought out that if a man was a member of the A.M.A. he automatically, of course, was a member of his state or local society.

DR. HIRSCHMAN: I fully agree that that is covered by the eligibility to membership. A man may still be eligible to membership, a very good man, but he just doesn't happen to join the society. Still he should be able to take the course. What I don't want are the irregulars, men who are not eligible to membership.

THE VICE CHAIRMAN: The amendment has been moved and supported.

The amendment was put to a vote and carried.

THE VICE CHAIRMAN: Now the motion by Dr. Insley that the report be accepted with this amendment.

The motion was put to a vote and carried.

XIII (3h). REFERENCE COMMITTEE ON PUBLIC RELATIONS COMMITTEE [VIII (7)]

DR. INSLEY: The next has to do with the report of the Public Relations Committee. Your Reference Committee recommends acceptance of the printed report, Mr. Chairman, and I so move.

DR. HARVEY C. HANSEN (Calhoun): Support it.

The motion was put to a vote and carried.

XIII (3i). REFERENCE COMMITTEE ON ETHICS COMMITTEE [VIII (8)]

DR. INSLEY: The next has to do or deals with the report of the Ethics Committee. Your Reference Committee recommends acceptance of this report. I so move.

DR. CARL F. SNAPP (Kent): Support it.

The motion was put to a vote and carried.

XIII (3j). REFERENCE COMMITTEE ON DELEGATES TO A.M.A. (VII)

DR. INSLEY: Next is the report of delegates to the A.M.A. Your Reference Committee recommends acceptance of this report, Mr. Chairman, and I so move.

DR. WM. J. STAPLETON (Wayne): Second it.

The motion was put to a vote and carried.

THE VICE SPEAKER: All these reports have only been accepted. They have not been adopted. Do you want to adopt them as a whole, do you want to go back over them, or would you let them go without being adopted?

DR. HARVEY C. HANSEN (Calhoun): I move they be adopted as a whole.

The motion was regularly seconded, was put to a vote and carried.

THE SPEAKER: Gentlemen, I think you realize just what a time-saving has been made in the preparation of this Delegates' Handbook. We have practically completed our second session and it is now just about thirteen minutes after four o'clock.

The chair will entertain a motion for recess.

XII (4). DETROIT'S MEDICAL SUPPLEMENT

DR. M. H. HOFFMANN (Wayne): Inasmuch as the matter which I have to bring before you properly comes under the head of new business, may I ask the Speaker to revert to new business?

THE SPEAKER: You offer that motion?

DR. HOFFMANN: I do.

THE SPEAKER: Is it supported?

The motion was regularly seconded, was put to a vote and carried.

DR. HOFFMANN: Inasmuch as the doctors throughout the ages have given of their time and service to humanity and have seldom been given much if any credit, the idea was conceived in the Wayne County Medical Society some six months ago to follow the lead of some county society in Kansas to get the cooperation of one newspaper in the city of Detroit and publish a medical supplement or medical section.

The summation of their ideas and efforts was published in yesterday's *Detroit Free Press*, of which I hold here a copy. This sixteen-page medical section of the *Detroit Free Press* printed yesterday contains an editorial on the front page with a special drawing by their staff artist. This editorial, written by the Editorial Director, Malcolm W. Bingay, is entitled "The Good Doctor."

This section contains a special poem written by Edgar Guest. It is copyrighted by the *Detroit Free Press* and the Wayne County Medical Society, because in the editorial matter, of which this section is constituted, are some 34 articles concerning the various specialties and branches of medicine written by 34 contributors from the Society. This section we believe is a step forward in extolling to the public the virtues of doctors of medicine. It was started under our Past President, one of your delegates, Dr. T. K. Gruber, under our President, Dr. C. E. Humphrey, and with the able assistance of the Editor of the *Detroit Medical News*, Dr. David I. Sugar, and under the personal direction and entirely unsolicited efforts of the Medical Editor of the *Detroit Free Press*, Mr. Lawrence C. Salter.

May I be so bold, Mr. Speaker, as to ask Mr. Salter (who is in back of the room) to please stand up? (Applause.)

Mr. Salter has with him something like 100 copies of this section, which he is glad to give to each and every delegate. He also has with him a thousand copies which will be in the adjoining hall, one for every person who is registered.

As an evidence, we might take just two minutes to read that editorial by Mr. Bingay, as I believe it will give to you just a sample of the value of this particular section. May I ask if you care to have that read or would you leave it for the members to read themselves?

THE SPEAKER: Well, I believe that would be up to the pleasure of the individuals.

DR. HOFFMANN: Would you care to hear it? Cries of "Yes."

Dr. M. H. Hoffmann read the editorial, "The Good Doctor."

The Good Doctor

By Malcolm W. Bingay.

A village doctor in the winter-bound mountains of Wales was aroused from midnight slumber by pounding at his door. Miles away, the messenger said, a mother was in agony and it looked as though both she and her baby would die.

The doctor fought his way through the snow drifts and the sleet for hours to get there by day-break. He delivered the child and saved the mother. No thought of financial reward from that destitute family! Just a knight in the armor of his profession living up to the oath of Hippocrates.

That was more than 70 years ago, but that simple physician to the poor lived to know his reward of that night's struggle.

When the guns were barking on the Western Front and the fate of the Empire was at stake, he saw it saved by the heroic decisions and the dynamic energy of that forlorn babe he saved to the world that morning.

The child was David Lloyd-George.

* * *

Thus it is that in every hour of his life the Good Doctor shakes dice with destiny. He sees life from the first feeble cry to the last sigh, and though oft he shields himself with a protecting crust of cynicism, deep down in his heart he walks humbly with God.

* * *

Oh, the glory of the years that lie behind and the

promise of the vista that stretches forth to the future!

Out of the terrors of darkness and superstition the men of medicine are guiding groping mankind.

War with all its bloody history of brave deeds cannot match the sublime courage of the valiant host in white whose names are forever emblazoned on the honor rolls of the art of healing.

Bichat, Lænnec, Liebig, Bernard, Helmholtz, Darwin, Pasteur, Lister, Baillie, Rokitsansky, Bright, Morgagni, Virchow, Schonlien, Louis, Gerhard, Schwann, Koch, Jenner, Frankel, Laveran, Klebbs, Manson, Loeffler, Behring, Ehrlich, Ross, Osler, Rush—the names of the illustrious dead seem endless. And a brilliant army of the living are carrying on.

* * *

The plagues that once swept the world have been very largely eliminated. Every generation shows that they have given to mankind a longer span of life. Man is healthier and happier because of the mighty legionnaires of medicine.

So, to you, the Guardians of Life:—Your profession is on the threshold of vast new discoveries that will revolutionize life on this earth. For you alone remains the romance of great adventure.

No matter how far you go into this new-found continent of science yet always there is a golden chain that binds you to us. It is a magic chain. If it is ever broken your quest for the golden fleece of knowledge will be in vain. The links of that binding force are your human contacts. Though you walk with kings you cannot lose the common touch. Still the greatest joy of your tasks will be to soothe a fevered brow and to bring into world-weary eyes the light of hope.

In this new, strangely complicated civilization into which we are rushing today, to you is dedicated the great task of not only keeping Man alive but, more:—keeping alive Man's faith in himself.

No man, no profession, has any higher call to duty: "For of the most High cometh healing." (Applause)

DR. R. H. PINO (Wayne): I should like to call your attention to Section 1, Article 9 of the Constitution, which reads: "The annual membership dues shall be fixed by the House of Delegates." I am asked by the members of The Council to call this to your attention so that you may be thinking about it a little bit between now and the next session if discussion comes up to increase the dues.

THE SPEAKER: You are simply calling that to the attention of the House of Delegates?

DR. PINO: Yes, sir.

THE SPEAKER: Are you ready for the motion to recess?

All in favor of recessing will say "aye"; contrary, "no." The motion is carried.

The meeting recessed at four o'clock.

Monday Evening Session

September 27, 1937

The Third Session of the House of Delegates convened at eight-fifteen o'clock, Speaker Reeder presiding.

THE SPEAKER: Is the Credentials Committee ready to report?

THE SECRETARY: Mr. Speaker, I hold in my hand the names of seventy accredited delegates to the Michigan Medical Society. This constituting a quorum, I move that this be considered the official roll call for the third session.

DR. CARL F. SNAPP (Kent): Second.

The motion was put to a vote and carried.

THE SPEAKER: I therefore declare the third and last session of the House of Delegates open and ready to continue with business.

The first item in this session is a supplemental report from The Council, by Dr. Urmston, the Chairman.

VI. ANNUAL REPORT OF THE COUNCIL (SUPPLEMENTED)

DR. PAUL R. URMSTON (Bay): Mr. Speaker and House of Delegates: In the report of Dr. Insley's committee on the postgraduate course, an endowment fund was mentioned, or the raising of \$500,000 to be used in postgraduate work. I am going to call on Dr. H. H. Cummings to explain this fund to you and the method by which it may be raised. Dr. Cummings.

DR. H. H. CUMMINGS (Washtenaw): Mr. Speaker, Officers of the Society, Members of the House of Delegates: I wish I could tell you how we could raise the half million dollars. I have only a few suggestions to make. Dr. Bruce has felt for some time that the postgraduate work was the most important function of the State Society.

As you well know, the state of Michigan has invested several thousand dollars in every graduate from its schools of medicine. It seems that if a man stops at the point of graduation there is a loss in the investment to the state of Michigan. The postgraduate work has been supported by three institutions, the Michigan State Medical Society, Wayne University, and the University of Michigan. The University of Michigan depends for its funds upon the legislators. Wayne University has a problem in reorganization. The doctors of the state, composing the Michigan State Medical Society, have to pass through periods of depression, as we well know. So that an adequate fund to support a postgraduate course such as you contemplate rests on a rather precarious foundation. To overcome this, Dr. Bruce has suggested that an endowment fund of one-half million dollars be raised in the next five years to support the kind of postgraduate work that you vision, where every man in the state of Michigan practicing medicine can keep up to date in his specialty or in his general practice. If every man practicing medicine in the state of Michigan could do this thing, we would solve ninety per cent of our problems. We would never have to worry about the cultists or their encroachment on the field of medicine because the people of the state of Michigan want good medicine or good medical service and if they can get it in every locality in the state of Michigan they will not be going to the cultists. Then we will not hear the public clamor for free clinics, for state and federal money to support the people of the state and to get for them adequate medical service.

How could the doctors of the state raise a half million dollars? Certainly no doctors have made this much money in the practice of medicine. Most doctors are satisfied to live in fair comfort and support their children. They are not in medicine to make money. They love to serve people. That is the mark of a true doctor.

But many of you know wealthy men who want to leave their money where it will perpetually help the people of the state of Michigan. And you could, if you would, influence such a man to leave money to a postgraduate fund. Dr. Bruce has taken one-quarter of the load right off our shoulders. He will personally be responsible for \$125,000 of this fund. (Applause) Can you doctors, will you doctors attempt, by a good live committee and by your personal efforts, to raise the balance? (Applause)

DR. PAUL R. URMSTON (Bay): Thank you, Dr. Cummings. While you were out of the room, Dr. Cummings, Dr. Insley reported on the certificate to be given for postgraduate courses. Will you explain to the audience that this certificate cannot contain the words "The University of Michigan" or "Wayne University?"

DR. H. H. CUMMINGS (Washtenaw): Mr. Speaker, I hate to take too much time, but according to the organization of Wayne University and the University of Michigan these institutions cannot issue a diploma to the doctors who are taking postgraduate work. But the Michigan State Medical Society, the organization back of this movement, the organization that started this movement, can give the doctors a certificate of attendance, and I think that is all the doctors want. So you will notice that the proposed certificate, drawn up and reported to you today, did not have on it "Wayne University" or the "University of Michigan." These institutions would like to give a diploma to doctors, they feel they are making an honest effort to progress, but they cannot do it. I think it is honor enough to have this great organization of the state issue a certificate stating that they have made the effort to carry on postgraduate work and bring themselves up to present time in medical knowledge.

DR. PAUL R. URMSTON (Bay): Therefore, Mr. Speaker, your Reference Committee should reconsider this endorsement. They ask it to be changed so as to read "Michigan State Medical Society" alone.

You have just heard how you are going to get your postgraduate work in the future, for your attendance only, or without any cost to you in your annual dues for that postgraduate work. But the Council, in studying the financial condition, has asked you to consider a raise in dues for the coming year of \$2. That is open for your discussion. Thank you, Mr. Speaker.

THE SPEAKER: What action, if any, does the House desire to take upon the supplemental report? Is the Chairman of the Reference Committee on Reports of the Council here? Dr. Pino? Would you care to have a motion to the effect that "University of Michigan" and "Wayne University" be stricken out from your report?

DR. RALPH H. PINO (Wayne): That was not my report.

THE SPEAKER: I asked for Insley.

DR. PINO: That was not to the Council.

THE SPEAKER: That came under postgraduate education. That is a standing committee. That is Dr. Insley's committee? I wonder if any other member of that committee is present.

XIII (3g). REFERENCE COMMITTEE ON COMMITTEE ON POSTGRADUATE MEDICAL EDUCATION [VIII (6)]

DR. A. V. WENGER (Kent): As a member of Dr. Insley's committee, I make such a motion. I make the motion that those portions be stricken out.

The motion was regularly seconded, was put to a vote and carried.

THE SPEAKER: The Secretary will please note it.

XII (5). PROPOSAL TO RAISE DUES

The second matter as presented by the Chairman of the Council is in reference to raising of dues. I presume that is at the general disposal of the House. It is therefore open for discussion. Is there any discussion?

DR. ALFRED LABINE (Houghton): The present dues, as I understand it, are \$15 a year, and \$5 for the local medical society. That is what we pay, \$15 a year in our county, or \$10 for the state and \$5 for the local. The raise of dues, so far as I am

concerned, is almost an impossibility. With \$15 now, the \$2 raise would make it \$17 a year. It is too much to belong to almost any organization. That is the way I stand.

THE SPEAKER: Is there any further discussion?

DR. D. I. SUGAR (Wayne): Our dues in Wayne County are \$30 a year. Part goes to the state. We feel in Wayne County that we are carrying about all we can carry. We heard reports of \$9,000 cash, outside of the money what you have in bonds. It is easy enough to vote money and it is easy enough to spend it. You have a balance of \$9,000 besides the money in bonds. I propose or suggest that this be voted down until we see what is necessary for the ensuing year. If the money is voted and if the money is raised it will be spent. I see no necessity for it. Therefore, I propose that this raise, even of the \$2, be voted down. As Dr. Luce said before the Wayne County Medical Society, on the proposition of raising dues of the Wayne County Medical Society—he suggested the alternative, rather than raising the dues, of getting every person who is eligible for membership into the society and in that manner raising the additional money. I thank you.

THE SPEAKER: Any further discussion?

DR. WM. C. ELLET (Berrien): I should like to know why this increase is necessary, what that money is to be used for. Did we go in the hole last year? Why is it necessary to raise the dues?

DR. PAUL R. URMSTON (Bay): May I answer? Is Dr. Carstens in the room?

DR. HENRY R. CARSTENS (Wayne): On the matter of dues, The Council feels that some raise would merely restore us to our former condition. The Council has felt that the recommended raise in dues would merely keep us in or restore us to our former position. The matter, of course, in the end is left for careful consideration by the House of Delegates to determine what its policy should be. Our annual statement is published every year at the end of the fiscal year. It appears in the February or March number of THE JOURNAL. I trust you all go over it carefully every year. As you know, our dues have been \$10 for some years, although at the time of the depression a remission was made amounting to \$1 or \$1.25 or \$1.50.

DR. T. K. GRUBER (Wayne): May I suggest that we go into executive session for this discussion?

THE SPEAKER: In order to do that, Dr. Gruber, you have to then so move and it will have to be voted upon. If the delegates feel we need an executive session they will so vote.

DR. T. K. GRUBER (Wayne): I move, sir, that we go into executive session.

The motion was regularly seconded.

THE SPEAKER: You have heard the motion, as supported, that we go into executive session. Dr. Luce, can you inform me whether that is debatable or not?

DR. H. A. LUCE (Wayne): It is not debatable.

The motion was put to a vote and carried.

THE SPEAKER: Therefore, we will go into executive session. Sergeant-at-Arms, will you select two or three executive assistants to poll the house?

DR. C. F. BRUNK (Wayne): I suggest that secretaries and executive secretaries of county medical societies and members of the profession be permitted to remain.

THE SPEAKER: I presume, according to past experience and strict ruling and from previous custom, unless by special permission, that only the delegates are permitted, and also officers of the Society. Can anyone rule to the contrary?

DR. H. A. LUCE (Wayne): I move that in our executive session be included regularly elected dele-

gates and alternates, members of the Michigan State Medical Society, officers, the executive secretaries of counties and of the State Society.

The motion was regularly seconded, was put to a vote and carried.

DR. J. J. O'MEARA (Jackson) (Sergeant-at-Arms): Mr. Speaker, your orders have been obeyed.

THE SPEAKER: Thank you, sir. I therefore declare this third session of the House of Delegates to be in executive session. I believe Dr. Carstens had the floor.

DR. HENRY R. CARSTENS (Wayne): With regard to our financial situation, you are well acquainted with the fact from a study of our last annual statement that our assets amount to about \$36,000. That amount originally was up to some \$40,000. At the time of the depression it dropped to about half, roughly to about \$19,000. In the last few years, due to appreciation of our securities, that has mounted gradually, so at the time of the last statement in December it was about \$36,000. Our dues, which have been fixed for some years at \$10 per year, were reduced at the time of the depression to amounts ranging around \$8.25 or \$8.50. Finally, last year they went up, for the first time in some years, to the specified amount of \$10 per year.

As you know, by our Constitution and By-Laws, the House of Delegates can fix the annual dues, which, as I have said, have been \$10 for several years past.

About two years ago the delegates decided to increase our expenditures through increased activities engaged in at a legislative session and other activities which rather sharply increased ordinary expenses that year. That was in 1935. In the last few years we have come out about even. We have varied in our increase in net worth for the past few years roughly about \$3,000 or \$4,000, of which the major share usually was made up by the increase in the value of our securities. Last year our actual net profit beyond that increase in securities was something like \$2,900. So far as I can recall, that was the most we have increased it in the last few years.

This past year with the same dues we have been subject to a rather extraordinary increase in expenses. As you know, the amounts allotted to certain of our committees were very substantially increased. Therefore, your Council made a study during the summer and also at our meetings at this session with a view to trying to estimate what would be our financial situation at the end of the year. That is exceedingly difficult now, of course, because we haven't struck a definite trial balance at this time and we will know the full figures only at the end of the year. We do know this, though, that our cash position at present is definitely less than it was last year by some \$8,000. It seems likely as a very rough estimate that possibly at the end of the year our situation may be worse than last year by roughly, say, \$6,000 or \$8,000, or possibly \$9,000 or \$10,000.

We have the money, of course, because we have our securities and cash reserve. The simple effect of that would be that every year we would have our bills paid, of course, but our assets would be that much less. As a rough estimate, a very rough estimate, as I say, it would be less by possibly \$8,000.

Therefore, The Council felt that it might with propriety suggest for the consideration of the House a possible increase in dues with a view to merely retaining our position. That is a matter, of course, for the House to decide, whether they wish to eat into our capital assets or whether they wish to

keep our capital assets at about the same figure they are at now.

Possibly this next year some of these expenditures will not be so heavy. Notably, for instance, in the case of legislation, in an off year our expenses are not quite so high. But they always are \$1,000 or \$2,000 anyhow, and possibly our Legislative Committee this coming year will seek to do some of the groundwork which will insure our position from a legislative standpoint in the future, the position we have gained in the last four years.

Therefore, it simply amounts to this: Do we wish to keep our assets at about the same figure that they are now, or do we wish to show a decrease in assets, for the current year, over our situation for the past few years? (Applause)

THE SPEAKER: Is there further discussion on the question of raising the dues?

DR. L. E. HOLLY (Muskegon): I think we as delegates from the several counties throughout the state realize what has been done in the last few years for the benefit of everybody in the practice of medicine. What has been done has been done at a cost to the State Society. I know of only one particular thing that I can speak of from an absolutely practical standpoint and that is the matter of cancer control. The State Society was at considerable expense to finance it and to have made numerous lantern slides for the education of the lay public throughout the state. All of you have felt and realized the value of that educational campaign. That is just one of the things that the State Society has done, outside of the legislative program. Nobody will deny that the Legislative Committee and our President, Dr. Perry (who couldn't be with us in this meeting), have done considerable for the benefit of all of the physicians of the state of Michigan. If we have confidence in the men whom we elect, then we should give them the funds to work with.

I sincerely believe that an increase of \$2 a year in the dues (twelve packages of cigarettes) certainly should not be denied the state officers and the various committees which are working, not for the committee members but for every one of the doctors in the state of Michigan. I sincerely feel that we should grant them an increase of \$2 a year in the dues. (Applause)

THE SPEAKER: Is there further discussion?

DR. WM. C. ELLET (Berrien): Mr. Speaker, I should like to make a motion that The Council be instructed to retrench on expenses and that the dues remain where they were, at \$10.

THE SPEAKER: You have heard the motion. Is it supported?

DR. ALFRED LABINE (Houghton): I second that motion.

THE SPEAKER: Is there further discussion?

DR. DONALD R. BRASIE (Genesee): It seems to me that this is a poor time to crab about a \$2 added expense per annum. The Legislative Committee has put through for the Society in the last two or three years things that have never been done by the Michigan State Medical Society before. Funds raised by those who would oppose this move have been variously reported as from \$20 to \$50 per member. You cannot maintain the dignity and the standing of the doctors of the state of Michigan on a pile of sawdust. You must have ammunition and you must have funds to support the men who are trying to do the right thing in the state. An added \$2 per year seems to me to be very small, a very little thing for a doctor to crab about, a doctor who will willingly go out and spend three or four times that in one night on a charity case. It seems to me that if we are going to do what we should do,

we have to have funds to do it with. It must be raised from the members of the State Society. They must pay for what they get. Everybody else does.

DR. R. H. PINO (Wayne): I think the expenses of the Economics Committee this year have been under \$100. I am not sure what it was. It isn't very far from \$100. At its meeting in Battle Creek the Economics Committee was asked to spend not more this following year than \$500. I don't know what it had been before. If some of our members are going to say that those who are managing the State Society can cut down their expenses, then I say that this year, as Chairman of the Economics Committee, there are going to be meetings, but the members are not going to take any more trips that require 500 miles driving, getting back home and losing a case, working in the interest of this society. In fact, I will continue to do it myself. (Applause.) Sometimes we get decidedly out of patience among ourselves here. I have a notion that one reason Dr. Perry became ill is that too much has been placed upon that man. There is always a great deal of strain placed upon those men.

We know that if we want to elect a President of this Society this year who will adequately represent us, who has shown that he has an interest in the Society and in all the affairs of the medical profession, we've got to do something to relieve the strain that necessarily comes to him. The President of the Wayne County Society died last year. A tremendous strain was put upon him not only by the Wayne County Medical Society but by the State Society. As a member of the Economics Committee I am not going to call upon him so much. You can be sure of that. I am not going to put in long distance telephone calls or go to that expense if we are not supported. I say it is nothing but a lack of understanding that anyone should say that The Council should not be supported in asking only \$2 more. You will make calls, you will make a hundred calls this year for which you charge nothing, that will cost you money. Now, make one extra call that costs you money, just \$2, if that will help the Society. We can do it and we are going to go on. I mean to say the medical profession will not go on and hold its place, if we do not have some support. I believe, Dr. Ellet, it would be a good thing if you withdrew your motion.

Cries of "Don't give him a chance," and "Vote him down." (Applause.)

DR. A. V. WENGER (Kent): I fully second the remarks of Dr. Holly and Dr. Pino.

THE SPEAKER: Is there further discussion? Are you ready for the question? All those in favor, say "aye"; opposed, "no." I would say, if my ears are correct, the motion is lost. Does it seem as if there was a division in the House? I have been asked to repeat the question. I am told that it amounts to this: That we endeavor to keep the expenses down and keep the dues the same. Am I right?

DR. ELLET: Yes, sir.

THE SPEAKER: Apparently there was a division. How do you wish to vote? A standing vote? All right. All those in favor of the motion will please rise.

Cry of "State the motion."

THE SPEAKER: I just did. The motion is, as I understand it, as told to me here by the stenotypist, that the expenses by the State Society be kept down or lessened, decreased, and that the dues remain the same.

All in favor of this motion will rise. (2) All those opposed will rise. (The balance) I don't believe it is necessary for the Secretary to count the vote. (The motion was lost.)

DR. E. D. SPALDING (Wayne): I move that the dues be raised \$2.

DR. F. J. O'DONNELL (Alpena): Support it.

THE SPEAKER: It is moved by Spalding of Wayne and seconded by O'Donnell of Alpena that the dues be raised \$2. Correct? All right. Is there any discussion? If there is no discussion, are you ready for the question?

The question was put to a vote and carried.

THE SPEAKER: Is there anything further to come before the executive session? If not, the Chair will entertain a motion to go out of executive session.

DR. A. P. BIDDLE (Wayne): I move, sir, we rise from executive session.

The motion was regularly seconded, was put to a vote and carried.

THE SPEAKER: The Chair will now entertain a motion to revert to the regular order of business.

DR. WM. J. STAPLETON (Wayne): I so move.

The motion was regularly seconded, was put to a vote and carried.

THE SPEAKER: We therefore will revert to the regular order of the day. We therefore will proceed under the head of supplementary reports from Reference Committees. We had original reports from three of our Reference Committees. I shall ask, first, however, if there are any further reports from the Reference Committee on Officers' Reports.

DR. DONALD R. BRASIE (Genesee): No further report.

THE SPEAKER: Is there any further report from the Reference Committee on Reports of Standing Committees? Having finished with the report of The Council, we shall proceed to the Reference Committee on Reports of Special Committees. Dr. Hart.

XIII (4) REFERENCE COMMITTEE ON REPORTS OF SPECIAL COMMITTEES (IX)

XIII (4a) REFERENCE COMMITTEE ON MATERNAL HEALTH COMMITTEE [IX (1)]

DR. DEAN W. HART (Clinton): Report of the Committee on Maternal Health: The Reference Committee is heartily in accord with the recommendations as made and hopes that the study will be continued. This committee should be complimented on the tremendous amount of work done.

I move the acceptance and adoption of this report.

The motion was regularly seconded, was put to a vote and carried.

XIII (4b) REFERENCE COMMITTEE ON CONTACT COMMITTEE TO GOVERNMENTAL AGENCIES [IX (2)]

DR. HART: Report of the Contact Committee to Governmental Agencies: This committee wishes to commend the Contact Committee for its efforts and suggests that the work be continued. The Committee heartily approves of the recommendation for the development of the Michigan Health League.

I move the acceptance and adoption of this report.

The motion was regularly seconded, was put to a vote and carried.

XIII (4c) REFERENCE COMMITTEE ON MENTAL HYGIENE COMMITTEE [IX (3)]

DR. HART: Report of the Mental Hygiene Committee: We approve of the report and the recommendations made and commend the committee for its work.

I move the acceptance and adoption of this report.

DR. SNAPP: Support it.

The motion was put to a vote and carried.

XIII (4d) REFERENCE COMMITTEE ON RADIO COMMITTEE [IX (4)]

DR. HART: Report of the Radio Committee: We approve the report of this committee and add a

suggestion that increasing care be taken to choose speakers qualified by voice and diction. It is hoped that the programs of the coming year may be similarly continued.

I move the acceptance and adoption of this report.

The motion was regularly seconded, was put to a vote and carried.

XIII (4e) REFERENCE COMMITTEE ON ADVISORY COMMITTEE TO WOMAN'S AUXILIARY [IX (5)]

DR. HART: Report of the Advisory Committee to the Woman's Auxiliary: We approve this self-explanatory report, and I move its acceptance and adoption.

The motion was regularly seconded, was put to a vote and carried.

XIII (4f) REFERENCE COMMITTEE ON LIAISON COMMITTEE WITH HOSPITAL ASSOCIATION [IX (6)]

DR. HART: Report of the Liaison Committee with Hospital Association: We approve the report of this committee and are heartily in accord with its recommendation that one committee be formed to take over similar work which is now being assigned to the four committees mentioned in the report. Your Reference Committee recognizes the importance of this committee and realizes that many matters of utmost importance to the profession, the hospitals and the laity will come to its attention from time to time.

I move the acceptance and adoption of this report.

The motion was regularly seconded, was put to a vote and carried.

XIII (4g) REFERENCE COMMITTEE ON LIAISON COMMITTEE WITH DENTISTS, NURSES AND PHARMACISTS [IX (8)]

DR. HART: Report of Liaison Committee with Dentists, Nurses and Pharmacists: We approve of the report of this committee.

I move the acceptance and adoption of this report.

The motion was regularly seconded, was put to a vote and carried.

XIII (4h) REFERENCE COMMITTEE ON SCHEDULES A, B, C, D [IX (9)]

DR. HART: Joint Report of Committee Studying Schedules A, B, C, D, and of the MSMS-MHAMAR Committee: We approve of the report of this committee.

I move the acceptance and adoption of this report.

DR. HANSEN: Second the motion.

The motion was put to a vote and carried.

THE SPEAKER: Thank you, Doctor Hart.

XIII (5) REFERENCE COMMITTEE ON AMENDMENTS TO CONSTITUTION AND BY-LAWS (X)

The next order of business is the Report of the Reference Committee on Amendments to Constitution and By-Laws, by Dr. Torgerson, Chairman.

DR. WM. R. TORGERSOON (Kent): Mr. Speaker and House of Delegates: The committee wishes to submit the following report and call your attention first to the amendment to the Constitution that is found in the Handbook on Page 86. That amendment reads as follows:

XIII (5a) REFERENCE COMMITTEE ON AMENDMENTS TO CONSTITUTION [X (1)]

"That Article V of the Constitution be amended to insert in line 8, following the word 'Secretary': 'The Speaker of the House of Delegates.' The sentence would then read, 'It shall consist of the Councilors, the President, the President-Elect, the Secretary, the Speaker of the House of Delegates, and the Treasurer of the Society.'"

"An additional line should be added to the section reading, 'The Speaker of the House of Delegates shall be a member of the Council and of its Executive Committee with power to vote.'"

The amendment makes the Speaker of the House a member of The Council.

The committee approved this amendment and now moves its adoption.

DR. ALFRED LABINE (Houghton): Support it.

THE SPEAKER: Is there any discussion?

The motion was put to a vote and carried.

DR. TORGERSON: The next amendment to the Constitution is found on Page 88 of the Handbook.

"Article 8—Officers:

"Section 2. The president, the president-elect, the councilors, the speaker, the vice-speaker, and the secretary shall be elected annually by the House of Delegates. The editor and the treasurer shall be elected by the Council at its annual meeting in January of each year. The councilors shall be elected for a term of five years each. These terms to be so divided that no more than four councilors are elected at any annual session. All these officers shall serve until their successors are elected and installed."

The committee is of the opinion that this amendment should not be adopted because (1) the position of Secretary will be more stable if left to the discretion of a body that does not change too frequently; (2) the Secretary is immediately responsible to The Council for his acts; (3) because of the close contact between the Secretary and The Council, the latter should be better able to determine his qualifications.

We move, therefore, that this amendment be not adopted.

The motion was regularly seconded.

THE SPEAKER: Is there any discussion?

The motion was put to a vote and carried.

DR. TORGERSON: The next article of the Constitution to be amended is Article 9, under Funds and Expenses (Page 88 of the Handbook.)

Section 3: "The invested funds of the Society shall be delivered to the Treasurer by the Vice-Secretary."

Section 4: "The Vice-Secretary shall collect all annual dues and all moneys owing the Society, depositing them in an approved depository and dispersed by him upon order of The Council. The Council shall cause an annual audit to be made of the funds of the Society by certified public accountants, and shall require the Treasurer and the Vice-Secretary to be bonded for \$25,000."

The committee feels that because the Constitution does not provide for a Vice-Secretary the amendment is inconsistent within itself, and we move that it be not adopted.

The motion was regularly seconded, was put to a vote and carried.

XIII (5b). REFERENCE COMMITTEE ON BY-LAWS CHANGE RE COMMITTEE ON DISTRIBUTION OF MEDICAL CARE [XI (4)]

DR. TORGERSON: Next we want to bring up an amendment to the By-Laws introduced by Dr. Pino. It was read this afternoon but I will read it again:

"Whereas, The duties of the Economics Committee of the Michigan State Medical Society are concerned largely with the problems of the distribution of medical care; and

"Whereas, The economic aspects of medical care, while essential, are not the prime objectives in the distribution of medical care; and

"Whereas, Emphasis on the word 'economics' in connection with medical society activities conveys to the public a wrong emphasis and a tendency to misunderstanding of the true objectives of the Society; and

"Whereas, The term 'distribution of medical care' is definitely more comprehensive and sets forth the functions of the committee more adequately; be it

"Resolved, That Chapter 6, Section 3 of the By-Laws of the Michigan State Medical Society be changed to read, 'The Committee on the Distribution of Medical Care,' in lieu of 'Committee on Medical Economics.'"

It so happens that throughout the Chapter in other sections the committee was mentioned, so this committee recommends that the final paragraph be changed to read:

"Be It Resolved, That Chapter 6 of the By-Laws of the Michigan State Medical Society be changed so that the words 'Committee on the Distribution of Medical Care' be

substituted for the words 'Committee on Medical Economics' wherever they appear in the sections."

We move that the amendment, as amended, be adopted.

The motion was regularly seconded, was put to a vote and carried.

XIII (5c). REFERENCE COMMITTEE ON BY-LAWS CHANGE RE DUTIES OF THE PRESIDENT [XI (6)]

DR. TORGERSON: The next amendment has to do with the "duties of officers" section and provides for amendment of Chapter IV of the By-Laws entitled "Duties of Officers," Section 1 of that Chapter:

"The President shall preside at all General Meetings of the Society, and shall fill all vacancies in offices and committees in consultation with the Council unless otherwise provided for; he shall appoint the members of all committees not otherwise provided for; he shall deliver the President's address and shall as far as practicable visit component county societies during his tenure of office; he shall have a voice in the deliberations of the House of Delegates and he shall be an ex-officio member of the Council; and

"Whereas, Experience and precedent show that a conscientious man elected to this responsible position of President accepts the above By-Law as a mandate to actually call personally on the fifty-four component county societies in this state; and

"Whereas, The general activities of the organization have grown to a degree requiring the President to devote the major portion of his time during tenure of office to the multiple and vital affairs of the Society; and

"Whereas, The Presidency of this Society is an honorary recognition usually bestowed on one who already has given distinguished service to organized medicine, and who should not be called upon to shoulder further arduous tasks and responsibilities demanding additional time and energy; and

"Whereas, It is expressly provided in the By-Laws that other officers of the Society, specifically the Secretary and the Councilors in the various districts, shall integrate county society activities and visit these component units regularly; therefore, be it

"Resolved, That Chapter IV, Section 1, of the By-Laws of the Michigan State Medical Society be amended by deleting from the duties of President the following clause: 'and shall as far as practicable visit component county societies during his tenure of office.'"

The committee recommends the adoption of the amendment and I so move.

The motion was regularly seconded, was put to a vote and carried.

DR. T. K. GRUBER (Wayne): The chapter on amendments to these By-Laws says:

"These By-Laws may be amended by a majority vote of the delegates present, after the proposed amendment is laid on the table for one session."

I believe that amendment to the By-Laws has not laid on the table for any session so far.

THE SPEAKER: It was introduced and therefore you might say was on the table one session. There is no other way in which it can be done with the program as stated. If this was to have been presented, we will say, early in the first session and then were to lay on the table the remainder of the first session, and then be continuously on the table over the second session, and part way into the third session, then it would have laid on the table approximately two sessions. So we have a right to believe that inasmuch as this was introduced at some time in the second session it still was having sufficient time for the Reference Committee to act upon it and sufficient time for the House of Delegates to discuss it. So I think we are really right when this is offered during the second session that it is laid on the table one session, to be disposed of during the third session. The Speaker stands corrected. Do I understand your question, Dr. Gruber?

DR. GRUBER: You do.

THE SPEAKER: I think it is mathematically sound.

XIII (5d). REFERENCE COMMITTEE ON BY-LAWS
CHANGE RE DUTIES OF THE COUNCILORS
[XI (7)]

DR. TORGERSON: The last amendment to the By-Laws, as introduced by Dr. Stryker, is as follows:

"That Chapter Five (5) Section Two (2) shall be deleted and a new Section, known as Chapter Five (5), Section Two (2), be adopted to read as follows:

"Each Councilor shall be the organizer, peace maker and censor for his District. He shall visit each component society in his District at least twice a year and keep in touch with the activities of these societies constituting his District. He shall make such reports as the Chairman of the Council shall request concerning the condition of the profession in that District.

"Section Three (3): Upon written statement, signed by at least half of the Delegates of the Councilor District, or by the Chairman of the Council, setting forth that the Councilor of that District has failed to perform his duties as prescribed above, and presented to the Speaker of the House of Delegates, the Speaker shall appoint an investigating committee of three (3) Delegates from one or more other Districts. Upon a confirmatory report the Speaker shall declare the office of Councilor in that District vacant. The then President of the Michigan State Medical Society shall immediately appoint a Councilor to act until the next Regular Session of the House of Delegates, at which time a successor shall be elected to fill the unexpired part of the term of the Councilor so removed.

"Present Section Three (3) shall be changed to read Section Four (4) and succeeding Sections numbered in consecutive order."

The committee recommends that the first paragraph of the amendment be adopted as written. It has to do with the duties of the Councilor. But that the second paragraph be deleted because the principle involved in that paragraph is not in accordance with a mutual organization of democratic nature. Second, that the procedure outlined is placed in the hands of too few individuals and is too drastic in character and open to abuse.

We would recommend substituting in its place the following paragraph:

"Section 3. Upon written complaint of at least half of the delegates of the Councilor District involved, presented to the House of Delegates, in regular or special session, stating that the Councilor of said District has been remiss in his duties as prescribed above, and has been notified a month previously of this proposed action, the Speaker of the House shall bring the matter before the meeting for consideration. On two-thirds' vote of the House of Delegates, this office shall be declared vacant and a successor elected."

We move adoption of the first paragraph of the amendment as written, and of the second paragraph as proposed by the committee, and the rest of the amendment as written.

The motion was regularly seconded.

THE SPEAKER: Is there any discussion?

DR. T. K. GRUBER (Wayne): I believe you have put that in one motion, two amendments. The one proposed here tonight, the first one, has laid on the table for one session. The second portion of this resolution proposed tonight couldn't have laid on the table. That should be put in two motions. I don't know if I am out of place in suggesting it, but we could adjourn this session for five minutes and then have another session in order to put it through.

THE SPEAKER: I think you are quite right from a parliamentary standpoint as well as from a Constitution and By-Laws standpoint, but the Reference Committee (I will stand corrected) has a right to change resolutions.

DR. L. J. HIRSCHMAN (Wayne): That is the report of a Reference Committee to whom matters have been referred. This is their report. We either accept it or reject it now.

THE SPEAKER: Any further discussion? Are you ready for the question?

The question was put to a vote and carried.

DR. TORGERSON: That is all.

THE SPEAKER: Thank you very much, sir. Our next order of business is the report of the Reference Committee on Resolutions. Dr. Christian.

XIII (6). REFERENCE COMMITTEE ON RESOLUTIONS (XI)

XIII (6a). REFERENCE COMMITTEE ON EMERITUS AND RETIRED MEMBERSHIPS [XI (3)]

DR. L. G. CHRISTIAN (Ingham): Mr. Speaker, the first has to do with a communication introduced by Dr. Mason of Menominee, a resolution from the Menominee County Medical Society, asking that Dr. Edward Sawbridge of Stephenson be elected to emeritus membership. He has complied with all of the Constitutional requirements and your committee moves acceptance and adoption of this report.

The motion was regularly seconded, was put to a vote and carried.

DR. CHRISTIAN: The Council of the Wayne County Medical Society have proposed Dr. O. S. Armstrong and Dr. W. R. Chittick for emeritus membership. Both men have complied with Constitutional requirements. Your committee moves acceptance and adoption of their membership.

The motion was regularly seconded, was put to a vote and carried.

DR. CHRISTIAN: The next is from Dr. Johnson of Tuscola, proposing for emeritus membership Dr. John Handy of Caro, who is now entering his fifty-first year in the practice of medicine. He has a petition signed by all members of his county society, requesting this body to grant Dr. Handy the membership asked for. The committee has recommended this and I move acceptance and adoption of this report.

The motion was regularly seconded, was put to a vote and carried.

DR. CHRISTIAN: Dr. LaBine of Houghton, through the Houghton County Medical Society, suggested for emeritus membership Dr. R. J. Maas and Dr. W. P. Scott. These men have been in good standing for more than twenty-five years and have practiced medicine for more than fifty years. The committee approves their applications and I move the acceptance and adoption of the committee report.

The motion was regularly seconded, was put to a vote and carried.

DR. CHRISTIAN: Jackson County suggests three men for emeritus membership. Dr. A. J. Roberts, practicing for fifty-two years; Dr. J. C. Kugler, fifty-one years; and Dr. D. W. Fenton, of Hillsdale, who was secretary of that county society for so many years. They have complied with the constitutional requirements and the committee recommends their election. I move the committee's report be accepted and adopted.

The motion was regularly seconded, was put to a vote and carried.

DR. CHRISTIAN: Shiawassee sends in the name of Dr. Alfred L. Arnold, who has complied with the constitutional requirements. It is approved by the committee and I move acceptance and adoption of the committee report.

The motion was regularly seconded, was put to a vote and carried.

DR. CHRISTIAN: Berrien County proposes the name of Dr. Edward J. Witt for a retired membership in the Michigan State Medical Society. He has complied with all of the constitutional requirements for this class of membership, has been approved by the committee, and I move acceptance and adoption of the committee report.

The motion was regularly seconded, was put to a vote and carried.

DR. CHRISTIAN: We have a resolution from the O.M.C.O.R.O. Medical Society, proposing the name of Dr. Levi Harris, of Gaylord. He has complied with the constitutional requirements for emeritus membership. It has been accepted by the committee. I move acceptance and adoption of the committee report.

The motion was regularly seconded, was put to a vote and carried.

DR. CHRISTIAN: Berrien County proposes the name of Dr. Fred N. Bonine for emeritus membership. From the records of the executive office in Lansing, Dr. Bonine has not filled out the years of membership in the State Medical Society and the committee concluded to declare him ineligible. I move the acceptance and adoption of the committee report.

The motion was regularly seconded.

THE SPEAKER: The motion is for acceptance and adoption of the committee's report, that Dr. Bonine is not eligible for emeritus membership because he has not been in the county society the number of years required by the Constitution. Is there any discussion.

The motion was put to a vote and carried.

XIII (6b) REFERENCE COMMITTEE ON PHYSICIANS' FEES—FIRST CLASS LIEN [XI (8)]

DR. CHRISTIAN: A resolution by Dr. Snapp:

"Whereas, At present physicians' and nurses' fees for services rendered in the last illness of all cases are considered as second-class and frequently as third-class claims by the Probate Court; and

"Whereas, Such classification of said claims renders an unfair hardship upon the professions; therefore, be it

"Resolved, That the Legislative Committee of this body be instructed to use its power and influence to have enacted at the next session of the State Legislature a bill making physicians' and nurses' fees for services rendered in the last illness first-class claims."

Your committee has gone over this and is heartily in accord with this resolution. We feel that such an attempt should be made.

Mr. Speaker, I move acceptance and adoption of this report.

DR. HANSEN: Second it.

The question was called for.

THE SPEAKER: Is there discussion?

DR. ALFRED LABINE (Houghton): Isn't it a fact that the undertakers already have a first claim? In this are we asking for something which we cannot get? I am quite positive, it is a fact, I know it, that the undertakers have the first claim on any death. So we are asking for something which, according to law, I don't think we can get. If I am wrong, I will be very glad to be corrected.

DR. CHRISTIAN: In certain states they take care of that very well.

DR. CARL F. SNAPP (Kent): Mr. Speaker, it was my idea in presenting that resolution simply to get on an equal basis with the undertaker, to have our claims presented as first-class claims along with theirs as first-class claims.

DR. ALFRED LABINE (Houghton): The best we could do on this would be second-class.

THE SPEAKER: That will be something.

DR. LABINE: It is stated as "first-class" claims. If it is a first-class claim, it doesn't make any difference if the undertaker has one or not. We are trying to get in a first claim.

THE SPEAKER: I think I can accept your interpretation.

Is there any further discussion of that motion? It is supported.

The motion was put to a vote and carried.

XIII (6c). REFERENCE COMMITTEE ON MORALS [XI (5)]

DR. CHRISTIAN: The next is a resolution offered by Dr. Pino:

"Whereas, One of the most serious problems confronting our people is that of crime and criminal tendencies among our youth; and

"Whereas, Sex crime constitutes so large a proportion that the Federal Bureau of Investigation headed by J. Edgar Hoover is soliciting aid from every responsible source; and

"Whereas, The drug marihuana which seriously affects the emotional level of individuals is rapidly increasing in production and consumption to the extent that it has become a serious problem to the Federal Bureau of Narcotics; and

"Whereas, We also recognize the detrimental effects of certain pictures and programs on the screen, and in magazines produced for public consumption and seemingly not adequately censored from the standpoint of mental hygiene; and

"Whereas, Untiring efforts are being put forth by leading newspapers, organizations concerned with mental hygiene and other interested groups in the solution of these problems; and

"Whereas, This is a problem of preventive medicine; therefore, be it

"Resolved, That the Michigan State Medical Society go on record in support of these efforts, and that copies of this resolution be sent to such organizations as are concerned."

Your committee is heartily in accord with this resolution and I move acceptance and adoption of the committee's report.

The motion was regularly seconded, was put to a vote and carried.

XIII (6d). REFERENCE COMMITTEE ON STUDY OF TERMINOLOGY IN GROUP HOSPITALIZATION [XI (9)]

DR. CHRISTIAN: The next resolution was introduced by Dr. Gruber.

"Whereas, Group hospital service (group hospital insurance) is a pertinent issue at the present time; and

"Whereas, The proper understanding of the definition of hospital service and medical service has not been reached to the satisfaction of the Michigan State Medical Society; and

"Whereas, It is the unalterable opinion of the Michigan State Medical Society that medical service shall be at all times divorced from hospital service; be it

"Resolved, That the President of the Michigan State Medical Society be empowered to appoint a committee of three (3) to confer with all interested groups in order that there may be a proper understanding of the terms hospital service and medical service; and be it further

"Resolved, That this committee be instructed to submit a full and complete report to the House of Delegates of the Michigan State Medical Society at the Annual Session of this body in 1938."

It has reference to the appointment of a committee of three. We have a committee that is already functioning in the State Society, appointed by Dr. Cook, a standing committee that is doing this very work, so your committee thought it best to substitute for the committee of three, a new committee, the assigning of this to the committee that is now concerned with this matter. We wish to change this resolution to read this way:

"Be It Resolved, That the President of the Michigan State Medical Society be empowered to refer this resolution to the proper committee and to confer with all interested groups in order that there may be a proper understanding of the terms hospital service and medical service; and be it further

"Resolved, That this committee be instructed to submit a full and complete report to the House of Delegates of the Michigan State Medical Society at the Annual Session of this body in 1938."

Your committee accepts this report as read, and I move the acceptance and adoption of the committee's report.

The motion was regularly seconded, was put to a vote and carried.

XIII (6e). REFERENCE COMMITTEE ON INSPECTORS FOR STATE BOARD OF REGISTRATION IN MEDICINE [XI (11)]

DR. CHRISTIAN: The next is a resolution by Dr. Perkins of Bay City.

"Whereas, Certain violations of the Medical Practice Act are in evidence in several counties of the state; and

"Whereas, To begin suit in such cases warrants must be signed and presented to the local prosecutor; and

"Whereas, It is not practical or advisable for members of the medical profession to sign such warrants; therefore, be it

"Resolved, That the Council of the Michigan State Medical Society immediately use its influence to secure for the Board of Registration an inspector whose duties it shall be to investigate and make charges against violators of the Medical Practice Act."

Your committee is not informed as to just how this can be done by The Council nor where The Council can seek money for the State Board of Registration. Therefore, your committee has agreed that we should like to have Dr. McIntyre, Secretary of the State Board of Medical Registration, discuss this on the floor in order to have proper consideration.

THE SPEAKER: Is Dr. McIntyre in the house?

DR. J. E. MCINTYRE (Ingham): Mr. Speaker, Members of the House of Delegates: This can be accomplished in one of two ways. First, if the Medical Practice Act under which we practice today could be amended whereby the moneys received by the State Board of Medicine should be earmarked in the State Treasury and be at the disposal of the State Board of Medicine.

The other mode of procedure would be by means of reregistration, as has taken place in some of the states. It seems to be gradually gaining each year.

DR. CHRISTIAN: We don't believe it would take a big program of legislation. Why not appropriate under the law and employ an investigator now. I think that is the meaning and intent of this resolution:

"Resolved, That the Council of the Michigan State Medical Society immediately use its influence to secure for the Board of Registration an inspector whose duties it shall be to investigate and make charges against violators of the Medical Practice Act."

Can it not be done by means of an appropriation?

DR. MCINTYRE: Yes, Mr. Chairman, that could be done if there was enough influence brought to bear upon the legislature at each session, that the appropriation be kept up to the right level. The law reads that the Board must not spend more than its revenue. It also says that the Board must abide by its budget as set by the legislature. If that could be kept up, Dr. Christian, it could be handled.

DR. CHRISTIAN: Yes. The committee approves of this resolution. We want some way to help the State Board of Registration, to help them get some money. You can do what you will. We know they can't get money at the next session of the legislature unless by rare coincidence we go to the administrative board, which I don't believe is practicable. Nevertheless, we feel that the principle of the resolution should be endorsed and we have approved it. Mr. Speaker, I move acceptance and adoption of this resolution.

The motion was regularly seconded, was put to a vote and carried.

XIII (6f). REFERENCE COMMITTEE ON FEES FOR MEDICAL INFORMATION IN INSURANCE CASES [XI (10)]

DR. CHRISTIAN: The next resolution was introduced by Dr. Humphrey:

"Whereas, The House of Delegates of the Michigan State Medical Society at its Annual Meeting in Jackson, September, 1929, adopted two resolutions calling for physicians' fees of not less than \$2 for filling out certain insurance forms, and

"Whereas, The members of the profession in Wayne County are heartily in accord with the principle and intent of those resolutions and are attempting to put them into effect; and

"Whereas, A certain amount of difficulty and confusion exists regarding the exact source of those resolutions, and services they comprehend, and the best method of enforcing them; therefore, be it

"Resolved, That the House of Delegates of the Michigan State Medical Society in convention assembled again discuss the subject matter of these resolutions with the object of clarifying them and possibly adding to the past action of the House of Delegates in such manner as to be of aid

to the general practitioner of medicine in complying with the aforementioned resolutions; and be it further

"Resolved, That the insurance companies be advised of any new action taken by this House of Delegates on the subject."

I think I shall ask Dr. Humphrey to discuss this resolution and then we will proceed to present it. Dr. Humphrey.

DR. C. E. UMPHREY (Wayne): I discussed this resolution this afternoon. I don't believe it is clear from the number of questions that were brought up as to just what was the intent of the previous resolutions in 1929. There have been several occasions of late when the insurance companies knew nothing of that action and very few of the doctors knew of it. We hope to have it simplified and have insurance companies and doctors informed as to what the intent of it was, and have the insurance companies inform the specialist so that when that doctor presents a bill he won't be placing himself in a bad light. I think that covers it.

DR. CHRISTIAN: Mr. Speaker, it has been accepted by the committee. I move acceptance and adoption of this resolution.

The motion was regularly seconded, was put to a vote and carried.

XIII (6g). REFERENCE COMMITTEE ON STUDY OF REQUIREMENTS FOR NURSES' TRAINING SCHOOLS [XI (12)]

DR. CHRISTIAN: Dr. Arnold of Owosso presents this resolution:

"Whereas, There is definite shortage of nurses throughout the state; and

"Whereas, In many hospitals it is impossible to supply adequate nursing care to patients; and

"Whereas, Many hospitals are desirous of re-establishing their nursing schools; and

"Whereas, The present requirements are so rigorous that it is economically impossible for the smaller hospitals to do this; be it

"Resolved, That it is the opinion of the Michigan State Medical Society that the Michigan State Board of Registration of Nurses should study this question and attempt to solve this situation by somewhat modifying their present requirements."

Again, before action is taken, I shall ask the sponsor of this resolution to give us his views on it. Dr. Arnold of Owosso.

DR. A. L. ARNOLD, JR. (Shiawassee): Several years ago we disbanded the training school on the advice of other hospitals and on advice of the State Board of Nurses with the idea that we could do the work cheaper by hiring graduate nurses. We have found, to our sorrow, that we can't do it cheaper with graduate nurses. We can't even get enough graduate nurses now to care for the patients that we have. We are trying to reestablish our training school and the requirements have been raised so high that it is impossible to do it. Our nurses' home, that we have always considered a beautiful building, is now considered to be inadequate. We have to equip a chemical laboratory in conjunction with our training school. We used to send our nurses to the high school for chemistry instruction. There are several other things that make it impossible for us to reopen our training school. I believe that several other men whom I have talked to here today believe that if the requirements were lowered sufficiently we would be able to establish our training schools again and train some nurses. The trouble is that a great many nurses have been trained. A short time after they get out of school they get married and are then unavailable.

DR. CHRISTIAN: I will repeat the last stanza:

"Resolved, That it is the opinion of the Michigan State Medical Society that the Michigan State Board of Registration of Nurses should study this question and attempt to solve this situation by somewhat modifying their present requirements."

The committee felt that we weren't getting into too much hot water, so we approved the resolution.

Mr. Speaker, I move acceptance and adoption of the report.

The motion was regularly seconded.

THE SPEAKER: Is there any discussion?

DR. W. JOE SMITH (Wexford): I should like to ask if that is intended to reduce the requirements for nurses in training or the requirements of the training schools?

DR. ARNOLD: The training school. In order to start a training school, certain requirements are necessary in the hospital and in the training school connected with it that I consider too high to be practicable.

DR. E. A. OAKES (Manistee): I think this is a very great problem for the smaller towns throughout the state. I know that in our hospital at the time of peak load it is almost impossible to get a nurse to take care of a case. We have pressed into service a good many of our married nurses who are still capable of working, in spite of the doctor's remarks, and yet time after time when we are having our peak load it leaves us where we can't do a thing. We have been using these so-called trained attendants, which are better than nothing. I don't believe that a nurse needs to be trained to do a doctor's work. I believe that the State Board of Nurses has raised the standards of nursing so high that a nurse considers herself almost a doctor. I know that a good many of these nurses that we have trained in our small school up in Manistee were perfectly capable of taking care of the patient, were perfectly capable of following orders and doing what the patient needs to have done. I know the situation with us is critical and I know that we need something done about it. I wish some of you fellows would come around to some of these smaller hospitals and see what we have to put up with. You would appreciate the fact that the situation needs to have something done about it. I don't mean three years from now. I think it ought to be done and done soon. I am very much in favor of having this taken up right away.

THE SPEAKER: Is there any further discussion?

DR. T. K. GRUBER (Wayne): I am wondering if the resolution as stated is just what the Michigan State Medical Society wants to convey to the public and to organized medicine in general.

I have some ideas on nursing. I believe that we should have training for different classes of nurses. I believe that there should be some realignment of the whole proposition of nursing, but I doubt if a resolution of this kind coming from the Michigan State Medical Society is going to leave the impression that we should like to have left. One of the difficulties at present with the requirements for nurses coming into this state or practicing in this state is that they must have a certain amount of pediatric work. When it comes to the matter of selecting nurses for operating room work we don't care a whole lot whether they have had any pediatric work or not. When it comes to the matter of selecting a nurse for certain surgical cases it makes a lot of difference whether she has had any pediatric work. There are not enough pediatric boards in the state of Michigan to begin to train the number of nurses that are required for Michigan. So I believe that this would stand a great deal more study before pronouncement is made and we should have some very definite recommendations made that might alleviate the situation.

THE SPEAKER: Is there further discussion? If not, are you ready for the question? Those in favor will say "aye"; opposed, "no." Apparently there is a

division. Those in favor will please rise. The Secretary will count the vote.

Cry of "State the motion."

THE SPEAKER: Dr. Christian?

DR. CHRISTIAN: I moved adoption of the committee's report. I will read the last paragraph of the resolution.

"Resolved, That it is the opinion of the Michigan State Medical Society that the Michigan State Board of Registration of Nurses should study this question and attempt to solve this situation by somewhat modifying their present requirements."

THE SPEAKER: Those in favor of that will please rise. (50) Those opposed will please rise. (17)

The motion is carried.

DR. CHRISTIAN: I move the adoption of the report of the committee as a whole.

The motion was regularly seconded, was put to a vote and carried.

THE SPEAKER: I should like to announce at this time that I shall be pleased to entertain a motion of thanks to Dr. J. D. Brook, who has kindly placed at the end of the platform two bushels of magnificent peaches which will be at your disposal at the end of the session.

DR. LABINE (Houghton): I move that Dr. Brook be thanked.

The motion was regularly seconded.

THE SPEAKER: I take it for granted there is no discussion.

The motion was put to a vote and carried. (Applause)

XIV. ELECTIONS, AND PLACE OF ANNUAL MEETING

THE SPEAKER: We now come to the next item of business, which is elections. I take it for granted, in fact, I know, that no one will vote who is not entitled to vote. I also would remind you that your nominating speeches will be absolutely limited to two minutes. As tellers I will appoint Dr. Southwick, Dr. LaBine and Dr. Scott.

The first officer to be elected is that of Councilor of the Seventh District, to succeed Dr. T. F. Heavenrich, Port Huron. The Chair will entertain nominations.

XIV (1). COUNCILOR OF SEVENTH DISTRICT

DR. H. M. BEST (Lapeer): It affords me a great deal of pleasure to place in nomination Dr. Heavenrich to succeed himself. We took a caucus of the delegates from the Seventh District today and we voted unanimously for Dr. Heavenrich. (Laughter)

DR. A. L. CALLERY (St. Clair): Being the second delegate from the Seventh District, I can agree with Dr. Best that we agreed unanimously. Dr. Heavenrich has served the Seventh District very faithfully and well. We are all pleased with the service that he has given to us and we believe he has also given great service to the State Medical Society for the number of years he has been on the Council. I have a great deal of satisfaction in seconding the nomination by Dr. Best of Dr. Heavenrich to succeed himself.

THE SPEAKER: Any other nominations?

DR. WM. C. ELLET (Berrien): I move the nominations be closed.

The motion was regularly seconded, was put to a vote and carried.

THE SPEAKER: I therefore declare Dr. T. F. Heavenrich elected as Councilor for the Seventh District.

PROCEEDINGS SEVENTY-SECOND ANNUAL MEETING

XIV (2). COUNCILOR OF EIGHTH DISTRICT

The next officer is that of Councilor of the Eighth District, to succeed Dr. W. E. Barstow. Nominations are now in order.

DR. MYRON BECKER (Griatiot): I nominate Dr. William E. Barstow, of St. Louis, to succeed himself as Councilor for the Eighth District. He was appointed over a year ago by Dr. Penberthy to serve the unexpired term of Dr. J. H. Powers of Saginaw. Since the short time he has been in he has entered wholeheartedly into the work as Councilor and he has established a record of which he may well be proud. It gives me great pleasure to nominate Dr. W. E. Barstow of St. Louis to succeed himself as Councilor for the Eighth District.

DR. O. G. JOHNSON (Tuscola): We like Dr. Barstow very well. I second the nomination.

THE SPEAKER: Any other nominations?

Upon motion regularly made and seconded, the nominations were closed.

THE SPEAKER: I therefore declare Dr. W. E. Barstow elected as Councilor for the Eighth District.

XIV (3). COUNCILOR OF NINTH DISTRICT

The next office is that of Councilor of the Ninth District, to succeed Dr. Harlan MacMullen of Manistee.

DR. W. JOE SMITH (Wexford): Due to the fact that Dr. MacMullen doesn't aspire to this position for five years, I should like to nominate the hard-working Secretary of the Grand Traverse Society, Dr. E. F. Sladek. This afternoon at a meeting of the delegates we voted unanimously for Dr. Sladek.

DR. E. A. OAKES (Manistee): I will second it, being the other member of the party.

THE SPEAKER: Any other nominations?

DR. HARVEY C. HANSEN (Calhoun): I move that the nominations be closed and that the Secretary cast the unanimous ballot for Dr. Sladek.

DR. ALFRED LABINE (Houghton): Second the motion.

The motion was put to a vote and carried.

THE SPEAKER: I therefore declare Dr. Sladek of Traverse City elected Councilor for the Ninth District.

XIV (4). COUNCILOR OF TENTH DISTRICT

Next is the election of a Councilor for the Tenth District to succeed Dr. Paul Urmston of Bay City.

DR. C. R. KEYPORT (O.M.C.O.R.O.): I have been instructed by the members of my county society to place the name of Dr. Urmston in nomination for Councilor for the Tenth District. Dr. Urmston has done a very fine job in our district.

DR. ROY C. PERKINS (Bay): I wish to heartily endorse what the previous speaker has said. I cannot say too much more because Dr. Urmston is a very close neighbor. I heartily second his nomination.

THE SPEAKER: Any other nominations?

Upon motion regularly made and seconded, the nominations were closed.

THE SPEAKER: I therefore declare Dr. Urmston elected Councilor of the Tenth District.

XIV (5). COUNCILOR OF FIFTEENTH DISTRICT

We now go to the election of a Councilor to supplant Dr. Frederick A. Baker, of Pontiac, Oakland County, his term expiring in 1940. It is because of his resignation.

DR. ERNEST BAUER (Wayne): I should like to place in nomination the name of Dr. George Sherman of Pontiac.

DR. R. F. SALOT (Macomb): I second that nomination.

THE SPEAKER: Any other nominations?

DR. C. T. EKELUND (Oakland): I second the

nomination of Dr. Sherman, of Pontiac. All three delegates from the county society have cast their ballots for the nomination of Dr. Sherman.

Upon motion regularly made and seconded, the nominations were declared closed.

THE SPEAKER: I therefore declare Dr. Sherman elected Councilor of the Fifteenth District to serve to the year 1940.

XIV (6). DELEGATE TO A. M. A.

The next item of business is the election of Delegate to the American Medical Association, to succeed Dr. Louis J. Hirschman of Detroit. The Chair will entertain nominations.

DR. A. G. SHEETS (Eaton): Mr. Speaker and Gentlemen of the House of Delegates: I have been many years, as we all know, in the practice of medicine. For several years I have been a member of this august body. I have been impressed with the way we do things here. One thing that has impressed me most of all was the fairness that always existed among us. Whenever a man came into this organization and showed signs of being a worker, a man who was willing to make sacrifices and go ahead and do everything that he could in the interest of organized medicine, we always stood ready and eager to help him along. You can go out probably tonight into Wayne County and take a man who has done wonders for the Michigan State Medical Society and you will make no mistake. It is due him, and we are doing right when we pick this man.

We are bringing you tonight a man from Ingham County who has worked long and well. His personal interests have always been in the background. He has looked alone to the interests of our organization. We bring to you tonight this man and ask you to drape about his shoulders your mantle of approval. This man, honest, fearless, dependable in all things, is L. G. Christian, of Lansing. (Applause)

THE SPEAKER: Dr. Christian of Lansing has been nominated.

DR. C. F. DeVRIES (Ingham): I should like to second the nomination of Dr. Christian as Delegate to the American Medical Association. I should like to read this from our Ingham County Medical Society:

"Gentlemen, Ingham County Medical Society wishes to inform the House of Delegates that they unanimously endorse Dr. Leo G. Christian as Delegate to the American Medical Association."

DR. R. L. FINCH (Ingham): As the third and final delegate from Ingham, I wish to second the nomination of Dr. Christian.

THE SPEAKER: Any other nominations?

DR. O. G. JOHNSON (Tuscola): Mr. Speaker and Members of the House of Delegates: It is a pleasant duty I have to assume this evening. We have two splendid men aspiring to this office. Sentiment tells me that I should vote for Dr. Christian, but policy tells me I should vote for the man I am about to name. Dr. Hirschman, as you all know, has been a fixture as a delegate in this House for years. I think he served nine years as delegate in the National House of Delegates, and three extra sessions. I think we cannot afford tonight to lose the services of a man with the qualifications of Dr. Hirschman. When once we have started we haven't found it advisable to go back to our county societies and ask them to retire us because of valiant service which comes from age. Isn't that equally true or more true with our national delegate? If there is any other way out of this situation I would be glad to accept it, but I can see no way we can retain the services of a man with the qualifications and experience of Dr. Hirschman other than to vote yes for him tonight. I wish to place the name of

Dr. Hirschman before you as a delegate to the national convention.

DR. J. A. WESSINGER (Washtenaw): I rise in support of the nomination of Dr. Hirschman and wish to reiterate what the previous speaker has said in regard to his qualifications for this position.

DR. VIVIAN VANDEVENTER (Marquette-Alger): I was going to second the nomination of Dr. Hirschman. It seems that just at this time in the American Medical Association we are looking for men of experience. We all know Dr. Hirschman is well known to his state and we feel that this time we should keep him on the job. He has the ability and his national popularity is an asset to this Society. I hope this Society will keep Dr. Hirschman on the job for this time. We need him now more than we ever needed him before.

Upon motion regularly moved and seconded, the nominations were closed.

THE SPEAKER: Two gentlemen have been nominated, Dr. Christian of Lansing and Dr. Hirschman of Detroit. The tellers will please come forward and get the ballots and distribute them. The Secretary will count them on the blackboard.

Balloting for Delegate to American Medical Association.

THE SPEAKER: Mr. Secretary, what is the result of the ballot?

THE SPEAKER: Dr. Christian, 48; Dr. Hirschman, 36.

DR. L. J. HIRSCHMAN (Wayne): Mr. Chairman, may I take this opportunity of thanking the House for the privilege of having served the Society. I bespeak for Dr. Christian my best wishes for his success. I move, sir, that his election be made unanimous. (Applause)

The motion was regularly seconded, was put to a vote and carried unanimously.

THE SPEAKER: I therefore declare Dr. L. G. Christian elected Delegate to the American Medical Association.

Announcement Relative to Technical Exhibit

THE VICE SPEAKER: We have a wonderful technical exhibit over in the Civic Auditorium across the street and it will be open starting tomorrow for three days. There are about seventy companies exhibiting there. That is far in excess of what we have had for many years. If we are going to keep these exhibits coming to this convention and renting space from us, we must have visitors call at their booths. We don't care whether you drink canned milk or not, but you can stop at the canned milk booth and sign a card. The representative there can take the cards back to his company and show that he interviewed so many different doctors. We urge you to visit all the booths whether you buy anything or not.

XIV (7). ALTERNATE DELEGATES TO A. M. A.

Next are Alternate Delegates.

DR. DONALD R. BRASIE (Genesee): I wish to present to this body the name of a man very well known and very well liked in his county society. I wish to present the name of Dr. G. J. Curry, of Flint, to succeed himself as Alternate Delegate.

DR. J. J. O'MEARA (Jackson): I should like to support the nomination of Dr. Curry of Flint to succeed himself.

THE SPEAKER: Are there any other nominations?

DR. HARVEY C. HANSEN (Calhoun): I move the nominations be closed and that the Secretary be instructed to cast the unanimous ballot for Dr. Curry to succeed himself.

The motion was regularly seconded, was put to a vote and carried.

THE SPEAKER: I therefore declare Dr. George J

Curry of Flint elected Alternate Delegate to the A.M.A.

Now an Alternate Delegate to succeed Dr. R. H. Pino, of Detroit. Nominations are now in order.

DR. R. H. PINO, of Detroit, was nominated for Alternate Delegate to the A.M.A. to succeed himself. The nominations were closed and the Secretary was instructed to cast the unanimous ballot for Dr. Pino.

THE SPEAKER: I therefore declare Dr. Ralph H. Pino of Detroit elected Alternate Delegate to succeed himself.

DR. T. K. GRUBER (Wayne): I believe it has been customary, at least for Alternates, to have a ballot. The one getting the most is the first Alternate and the one getting the least is the second Alternate. I believe that is customary.

THE SPEAKER: I can decide that very quickly for you. There is usually a split ballot. We usually ask them to be good sportsmen and put their names in a hat. Isn't that right?

DR. GRUBER: I believe it was last year. I ask if you have read the method of procedure for selecting Alternates.

THE SPEAKER: I can read it if somebody can interpret it for me. We have this same old discussion year in and year out, and when we get through we put the names in a hat and draw them out. That is what we can do tonight.

THE VICE SPEAKER: The Speaker of the House of Delegates has no vote of his own except in case of a tie vote. As I see it, these two delegates or these two gentlemen both received the same number of votes, a unanimous vote, so therefore I think it is up to the Speaker to determine who is the ranking alternate. (Applause)

THE SPEAKER: I think you will also remember that in that case, the Speaker not desiring to embarrass anyone and the House of Delegates not wanting to embarrass the Speaker, the Speaker may also ask the Vice Speaker to vote as well. (Laughter) I thought so. (Laughter)

DR. R. H. PINO (Wayne): Would it not be proper for me to suggest that Dr. Curry be the first choice?

THE SPEAKER: Inasmuch, Dr. Pino, as you have each succeeded yourselves, do you recall who was senior last year? You are chosen by seniority.

MEMBER: I rise to a point of order. On Page 100 there is very carefully written out exactly what should happen in case of a tie vote.

THE SPEAKER: I think you are quite right. That that is the same thing we have had year in and year out. They draw them out of a hat. (Laughter) It is just good sportsmanship.

MEMBER: The Speaker and Vice Speaker each casts a ballot and the tellers draw out which one is elected.

DR. I. W. GREENE (Shiawassee): May I also speak on this subject? We had five alternates. Three were holdovers from the last year. We balloted. We balloted and Dr. Curry was elected as the first alternate. I see no reason he doesn't hold over.

DR. WM. C. ELLET (Berrien): Which one of these two men is senior to the other? According to the By-Laws, there is a proper way to do that. It is on Page 100.

"In case of a tie still resulting, the Speaker and Vice Speaker shall each fill out a secret ballot, one of which shall be drawn at random by the chief teller."

THE SPEAKER: That is just what I told you.

DR. ELLET: I move it be done.

THE SPEAKER: Will the tellers prepare the ballots?

The third one out, George. A tie vote. (Laughter)

PROCEEDINGS SEVENTY-SECOND ANNUAL MEETING

Balloting for selection of senior Alternate Delegate to A.M.A.

THE SECRETARY: Dr. Curry.

THE SPEAKER: I therefore declare Dr. Curry and Dr. Pino elected Alternate Delegates to the A.M.A., with Dr. Curry as the senior Alternate Delegate.

Now that we have had that fun, we come to the next item of business, which is the election of a President-Elect. The Chair will now entertain nominations.

XIV (8). PRESIDENT-ELECT

DR. J. M. ROBB (Wayne): Mr. Speaker and Gentlemen of the House of Delegates: An unusual privilege has been given to me tonight and that is to present to you a psychiatrist as President-Elect. There is nothing bad about that thing, it is not saying that we need a psychiatrist to do the job, but Dr. Luce has had an unusual experience in the practice of medicine. In the first place, he has practiced for years; in the second place, he has practiced general medicine for years; and in the third place, he has become an unusually good psychiatrist. With conditions as they are at the present time, with the problems that face medicine, I believe that we need an individual who has had the broad experience that Dr. Luce has had, one who toward the finish of the road has come to treat the mind. As I view this whole situation in the last few years, that is the most important thing that we have. Besides that, Dr. Luce has served in his Society and in the Wayne County Society as President, on the Council, on the Board of Trustees, as Speaker of the House of Delegates. In fact, in every particular position he has served with unusual ability and unusual constancy. I don't know of anyone in the entire state of Michigan who should be considered in the same terms as the white-haired sage of David Whitney Building.

Therefore I have a great privilege of presenting to you the name of Dr. Henry A. Luce as President-Elect of the Michigan State Medical Society. (Applause)

THE SPEAKER: Dr. Henry A. Luce has been nominated. Is there a second?

The nomination was severally seconded.

DR. DONALD R. BRASIE (Genesee): I move the nominations be closed and the Secretary be instructed to cast the unanimous ballot for Dr. Luce.

The motion was regularly seconded, was put to a vote and carried.

THE SPEAKER: I consider it one of the most splendid honors I have had to declare Dr. Henry A. Luce President-Elect of the Michigan State Medical Society. I invite Dr. Luce to the platform. (Rising applause)

Members of the House of Delegates: I present to you your new President-Elect, Dr. Henry A. Luce. (Applause)

PRESIDENT-ELECT LUCE: This comes as a complete surprise to me. (Laughter) Even in listening to that speech of Dr. Robb, I was wondering whom he was talking about. As a further proof, I will say Dr. Henry Cook about an hour ago had his picture taken with me for tomorrow morning's paper. (Laughter)

Friends, you have made me very happy. You have also seriously impressed me with the responsibilities which I am about to assume. Somebody said if a man has a thousand friends he has not one to spare, if he has one enemy he will meet him everywhere.

I feel that I have a thousand friends here tonight and I know that in meeting the obligations which I assume I cannot spare one of them. I thank you. (Applause)

THE SPEAKER: I sat beside him and with him for so long that—well, he is the same old Henry.

Now we come to the next office, that of Speaker of the House of Delegates. The Chair will entertain nominations for Speaker of the House of Delegates.

XIV (9). SPEAKER OF HOUSE OF DELEGATES

DR. LUCE: Mr. Speaker, while I am in tune and if I am in order at this time (perhaps this is my swan song in the House of Delegates), nothing will give me greater pleasure than to nominate for Speaker of the House of Delegates, Dr. Phil A. Riley, of Jackson. (Applause)

DR. J. J. O'MEARA (Jackson): I am not one of the ranking orators like my friend Dr. Robb in extolling the beauties of Dr. Phil A. Riley of Jackson, but I hereby second the nomination of Dr. Phil. Riley of Jackson. Jackson County is unanimously in support of Dr. Phil. Riley of Jackson.

THE SPEAKER: If I didn't know that that speech was made by his brother-in-law I would say it was a great speech. (Laughter)

Dr. Phil. Riley has been nominated.

Upon motion regularly made and seconded, the nominations were closed and the Secretary was instructed to cast the unanimous ballot for Dr. Philip A. Riley for Speaker of the House of Delegates.

THE SPEAKER: Dr. Riley, allow me to congratulate you. I should like to have a word from you.

DR. LUCE: Mr. Speaker, again I wish to assume my rights as long as possible. It is our understanding that you are retiring from the office of Speaker voluntarily. We are deeply appreciative of your contributions, your patience, your skill and your mechanical ability. In view of certain things that I wish to introduce, I should like to request that we suspend the regular order of business and open up under new business.

THE SPEAKER: You offer that motion?

DR. LUCE: Yes, sir.

The motion was regularly seconded, was put to a vote and carried.

THE SPEAKER: Therefore, we revert to the order of new business.

DR. LUCE: Mr. Speaker, under the head of new business, I should like to make this motion: That the House of Delegates recommend to the Council of the Michigan State Medical Society that an expenditure of money be made to purchase for our retiring Speaker a replica of the badge that now adorns his manly bosom. I make that motion.

The Vice Speaker assumed the chair.

DR. J. M. ROBB (Wayne): I support the motion.

The motion was put to a vote and carried by a unanimous rising vote. (Applause)

THE VICE SPEAKER: The Chair will now entertain a motion to return to the regular order of business.

XII (4). DETROIT MEDICAL SUPPLEMENT

DR. F. T. ANDREWS (Kalamazoo): While we are under new business, I wish to take this opportunity to ask that a vote of thanks be extended to the *Detroit Free Press* for their medical supplement which they have printed and which will carry throughout the breadth of Michigan the message of the doings of the Michigan State Medical Society.

THE VICE SPEAKER: Will someone put that in the form of a motion?

DR. T. K. GRUBER (Wayne): Mr. Chairman, I so move.

The motion was regularly seconded, was put to a vote and carried.

THE VICE SPEAKER: Is there anything else to come up under the head of new business?

DR. L. J. HIRSCHMAN (Wayne): As this will be the last chance to present new business, I should like to move, sir, that the House of Delegates of the

Michigan State Medical Society extend a cordial vote of thanks to the profession of Grand Rapids for the excellent manner in which they have already entertained us and will entertain us, and also to the press of Grand Rapids for the fine type of publicity that they are giving to us at the present time.

The motion was regularly seconded, was put to a vote and carried.

THE VICE SPEAKER: Is there anything else to come up under the head of new business? If not, the Chair will entertain a motion to return to the regular order of business.

DR. J. M. ROBB (Wayne): I move, sir, we revert to the regular order of business.

DR. T. K. GRUBER (Wayne): Support it.

The motion was put to a vote and was carried.

The Speaker resumed the chair.

XIV (10). VICE SPEAKER OF HOUSE OF DELEGATES

THE SPEAKER: The next order of business is the election of a Vice Speaker. The Chair will entertain nominations for office of Vice Speaker.

DR. C. R. KEYPORT (O.M.C.O.R.O.): Mr. Speaker, I wish to place in nomination the name of a man who is new to the House of Delegates. However, I feel that he has all the qualifications and I am sure he has the personality to stand behind the Speaker and conduct meetings in a very satisfactory manner. I therefore wish to present the name of Dr. Martin H. Hoffmann, of Eloise.

THE SPEAKER: Dr. Hoffmann has been nominated. Are there any other nominations?

Upon motion regularly made and seconded, the nominations were closed and the Secretary was instructed to cast the unanimous ballot for Dr. Hoffmann.

THE SPEAKER: I therefore with extreme pleasure declare Dr. Martin Hoffmann elected Vice Speaker of the House of Delegates. Is Dr. Hoffmann in the room? Will you please present yourself in front of this group whom you will have to face? (Applause)

XIV (11). PLACE OF ANNUAL MEETING

Next in order is the selection of the place of the annual meeting. The Secretary will inform us.

THE SECRETARY: There is on file just one invitation for the 1938 meeting. It is a letter from the Detroit Convention and Tourist Bureau.

"We are pleased to enclose herewith invitation from the Mayor, the Detroit Board of Commerce and this Bureau, inviting the 1938 convention of the Michigan State Medical Society to Detroit.

"Very truly yours,

"J. Lee Barrett,

"Executive Vice President."

THE SPEAKER: Inasmuch as there has been not

one invitation that has been delivered properly, and inasmuch as the place of the annual meeting is selected by suggestion of the House of Delegates to The Council, what is your pleasure?

DR. CARL F. SNAPP (Kent): I move that we accept this invitation and hold our meeting next year, 1938, in Detroit.

The motion was regularly seconded.

DR. P. L. LEDWIDGE (Wayne): Far be it from me to be wanting to hurt anyone, but if there isn't anything in writing from a medical society at all I think that ought to be discussed. Whose invitation was that?

THE SPEAKER: I think the Secretary can furnish you that information. He has more than one invitation here, I think.

THE SECRETARY: The letter I read explains the other communications attached hereto, one from the mayor of the city of Detroit, one from the Board of Commerce, and one from the Convention and Tourist Bureau. This other correspondence I believe is just letters bearing out those invitations from those organizations in Detroit.

DR. LEDWIDGE: Are there any letters from any medical society or any medical men at all in there? Shouldn't there be a letter or some invitation from the medical society before we act on that?

THE SPEAKER: The Secretary informs me that there is apparently no invitation directly from the Wayne County Medical Society.

DR. J. M. ROBB (Wayne): May I take the place of Dr. Humphrey and Dr. Blain? Is Dr. Blain here? Under these circumstances, I think either one of those gentlemen should absolutely invite the State Society to meet with us. I know it is an oversight. It is just a matter of neglect on their part because always the Wayne County Medical Society is delighted to have the State Society meet with us. I am sure these gentlemen will be glad to invite you.

DR. L. J. HIRSCHMAN (Wayne): I wish to offer a substitute motion for that of Dr. Snapp. That is that the matter of acceptance and the decision on the place of meeting be left to The Council. I am sure that an appropriate invitation will be sent to you from the Wayne County Medical Society. We would be glad to have you come every year if you will come.

DR. A. G. SHEETS: I support the motion.

The motion was put to a vote and carried.

XV. ADJOURNMENT

THE SPEAKER: We now come to the last thing. The Chair will entertain a motion to adjourn.

DR. J. M. ROBB (Wayne): I move we adjourn.

The motion was regularly seconded, was put to a vote and carried, and the meeting adjourned at eleven o'clock.

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OF GENERAL MEDICAL AND SURGICAL INTEREST

Syphilis in Relation to Prevention of Blindness: Study of 100,000 Case Records

In order that the number of cases of blindness and marked diminution of vision among persons who have acquired or congenital syphilis might be reduced, Conrad Berens and Jacob A. Goldberg, New York (*Journal A. M. A.*, Sept. 4, 1937), analyzed and tabulated the records of five important eye institutions in New York City. The total number of records studied was more than 100,000. Records of patients were examined in order that the following information might be obtained: personal history in relation to syphilis, family history, clinical observations, laboratory observations, syphilitic manifestations of the eye, diagnosis (both on admission and on discharge), social service and follow-up for the eye condition and for the syphilitic condition, disposition of the case and effect of syphilitic treatment on the condition of the eye. In seeking data on syphilitic manifestations in the eye the authors placed special emphasis on cases in which the following diagnoses were indicated: iritis, iridocyclitis, retinitis, optic neuritis, choroiditis, optic atrophy, ophthalmoplegia, Argyll Robertson pupil and interstitial keratitis, as well as other diseases. A special form was prepared for this study. The summary of the case records shows that a total of 5,969 patients, or about 6 per cent, presented diagnoses which were classified by the special Committee on the Study of Syphilis and Eye Diseases as possibly having syphilis as an etiologic factor. However, of the 2,237, or 37.5 per cent, who were given Wassermann tests, 444, or 19.9 per cent, had positive reactions. Since the method of keeping records varied widely in the five institutions studied, only the most general conclusions may be drawn. (1) The personal histories, although inaccurate and lacking in detail, showed that the patients with syphilitic eye lesions gave birth to forty nine stillborn children. In order that more of these valuable data may be obtained, it is recommended that personal histories be more accurate and detailed, special emphasis being placed on the history of syphilis, genital lesions, cutaneous lesions and ulcers and on the exact amount of treatment received and where such treatment was given. (2) The family histories were inaccurate but the small group recorded showed that the relatives of patients had forty-six stillborn children, that syphilis affected the entire family in twelve instances and that there were two cases of syphilitic insanity and thirteen syphilitic deaths in the patients' families. It is recommended that the family histories of patients with eye lesions which may be caused by syphilis include data regarding syphilis in the father, mother, children and other relatives. (3) The clinical, medical and neurologic data were most incomplete, as congenital syphilis was recorded in only fifty-one cases, meningovascular syphilis in twelve, tertiary syphilis in twenty-four, tabes dorsalis in fifteen, secondary syphilis in nine, primary syphilis in nine and cerebrospinal syphilis in seven. (4) Laboratory examinations showed that Wassermann tests were made in only 2,237 (37.5 per cent) of the 5,969 cases in which the diagnosis was an eye disease of possible syphilitic origin. Of the patients tested, 444, or 19.9 per cent, had positive reactions. (5) The data regarding diagnosis and examination of the eye lesion were often inaccurate and insufficient. (6) The social service and follow-up work in relation to the eye disease and to syphilis showed an appalling lack of thoroughness. Although all the in-

stitutions had social service departments, only a small percentage of the patients with positive Wassermann reactions were followed up. (7) The great importance of social service work in the prevention of unnecessary blindness is evident from this study, but recorded data were incomplete. (8) Notes on progress often failed to indicate the result of anti-syphilitic treatment from the point of view of the eye or from the serologic standpoint. If much unnecessary blindness caused by syphilis is to be prevented, laboratory examinations, social service follow-up studies and the effect of treatment must be carried out in a systematic manner in hospitals and clinics. Especial attention must be given to the follow up of individual patients and their families.

The Nature of Fatigue

Collier¹ provisionally defines fatigue as a state of the human organism in which there is a significant lack of balance between intake and output of biologic energy. This absence of harmony may exist between the organism and its environment or between the various subordinate parts within the organism itself. It is frequently manifested by deterioration of efficiency, feelings of tiredness, physiologic changes in the bodily organism (pulse rate, pulse pressure and so on) or as combinations of all these. It is not a disease, but it may be prodromal to disease. The human organism, he says, begins to suffer from fatigue whenever the available reserves required for any particular kind of activity have become dangerously depleted. The degree of the exhaustion of the reserves of energy of a part or the whole of the organism may be so profound that a brief rest serves only partially to restore those reserves. It is clear, however, that chronic morbid fatigue, even when it occurs among industrial workers, is not always due to the industrial activity. Neither illness nor fatigue is ever due to single isolated causes, but both are the outcome of a number of causes acting together. The diagnosis of morbid industrial fatigue is suspected by the experienced practitioner when faced with a patient who looks tired, whose eyes are heavy, who yawns, whose shoulders droop, who moves slowly and whose complexion is pallid. The individual usually complains of tiredness in the morning, saying that he sleeps heavily but is unrefreshed. The patient frequently suffers from headache and complains of vague pains in some part of his body. Differential diagnosis must take into account and exclude illness, normal tiredness and learning fatigue. After exclusion of these other disorders, if inquiry fails to reveal any reasonable explanation of fatigue from which the patient is suffering because of personal factors, a tentative diagnosis of industrial fatigue may be made. As soon as this diagnosis has been made it is necessary to be able to discover the actual (industrial) cause or causes of the fatigue in the particular group of workers. The latter may be roughly classified into conditions within the factory, composed of physical causes such as temperature, humidity, hours of work and exposure to industrial poisons, or to emotional components such as monotony of work, group harmony and psychologic fitness. Furthermore, industrial conditions operating largely outside the factory must be studied, including the regularity and adequacy of meals, the selection of personnel, night work and traveling to and from work. The problem of industrial fatigue is as important as it is complex. It requires an impartial scientific study in all its aspects by a team of trained specialists. Thus only will it be possible to abolish morbid fatigue from industry.—*Jour. A. M. A.*, Sept. 11, 1937.

¹Collier, H. E.: The recognition of Fatigue, with Special Reference to the Clinical Diagnosis of Morbid Fatigue in Industry. *Brit. M. J.*, 2:1322, (Dec. 26) 1936.

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OCCUPATIONAL DISEASES TO BE REPORTED

The Bureau of Industrial Hygiene has prepared the necessary forms for the reporting of occupational diseases as required under Act No. 210, P. A., 1937. This act, an amendment to the occupational disease law of 1911, provides that every physician, hospital superintendent, or clinic registrar having knowledge of a case of occupational disease shall, within ten days, report the same to the State Department of Health. The necessary forms for these reports and instructions for their use have been sent to all Michigan physicians. The act became effective October 29, 1937.

A more accurate analysis of the prevalence of occupational diseases in Michigan's industries may be expected from effective operation of the new law. It must be emphasized that all reports of occupational diseases and all records and data pertaining to these reports are not open for public inspection and the Michigan Department of Health cannot be subpoenaed to present such information in a suit at law. The act also empowers the Michigan Department of Health to provide the employers of the state with such instruction and information as may be deemed proper to prevent the occurrence of occupational diseases. The characteristics of an occupational disease for the purpose of this act include the following:

1. It arises out of and in the course of the patient's occupation.
2. It is caused by a frequently repeated or a continuous exposure to a substance or to a specific industrial practice which is hazardous and which has continued over an extended period of time.
3. It presents symptoms characteristic of an occupational disease which is known to have resulted in other cases from the same type of specific exposure.
4. It is not the result of ordinary wear and tear of industrial occupation or the general effort of employment or the kind of illness that results from contacts or activities in life outside of the patient's occupational pursuits.

Act No. 210, P. A. 1937

The amended title and amended and added sections of Act No. 210, P. A., 1937, read as follows:

An act to protect the public health; to require the reporting of occupational diseases to the state department of health; to prescribe the duties and powers of the state department of health with reference thereto; and to prescribe penalties for the violation of the provisions of this act.

Sec. 1. On and after the effective date of this enactment every physician, hospital superintendent, or clinic registrar having knowledge of a case of occupational disease shall within ten days report the same to the state department of health on a form provided by the state department of health, giving the name and address of the patient, the name and business address of the employer or employers, the business of the employer, the place of the patient's employment, the length of time of his employment in the place where he became ill, the nature of the disease, and any other information required by the state department of health. All such reports and all records and data of the state department of health pertaining to such diseases are hereby de-

(Continued on Page 906)

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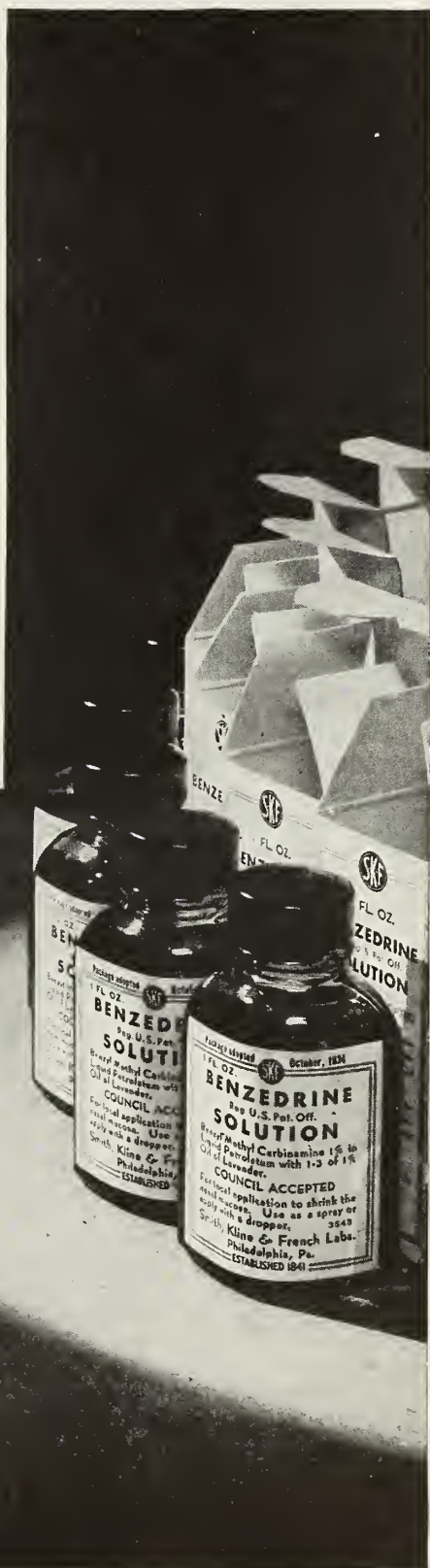
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(Continued from Page 904)

clared not to be public records. The department of labor and industry shall have access to any such record in any case where any complaint or suit shall have been brought before it.

Sec. 1a. An occupational disease, for the purpose of this statute, is an illness of the body which has the following characteristics:

1. It arises out of and in the course of the patient's occupation.

2. It is caused by a frequently repeated or a continuous exposure to a substance or to a specific industrial practice which is hazardous and which has continued over an extended period of time.

3. It presents symptoms characteristic of an occupational disease and is known to have resulted in other cases from the same type of specific exposure.

4. It is not the result of ordinary wear and tear of industrial occupation or the general effect of employment or the kind of illness that results from contacts or activities in life outside of the patient's occupational pursuits.

Sec. 1b. The state commissioner of health is hereby authorized and directed to design and provide suitable blanks for reporting occupational diseases, and appropriate instructions for their use, and to furnish them freely to registered physicians, to medical clinics, hospitals, and industrial plants.

Sec. 1c. Whenever the state commissioner of health receives a report as provided by section one or has reliable notice that there is within the state a case of occupational disease, he may cause an investigation to be made to determine the authenticity of the report and the cause of the disease.

Sec. 1d. Once each year and at such other times as is deemed appropriate, the state department of health shall compile statistical summaries of all occupational diseases reported and accepted as covering true occupational diseases, together with the type of employment leading to the occurrence of such diseases. The state department of health shall disseminate to all employers of this state instruction and information deemed proper and expedient to prevent the occurrence of occupational diseases.

Sec. 2. Any physician, hospital superintendent, or registrar in charge of hospital or clinic records who shall fail to make any report required by the preceding section, or who shall wilfully make any false statement in such report, shall be deemed guilty of a misdemeanor and on conviction thereof shall be punished by a fine of not more than fifty dollars.

Sec. 3. It shall be the duty of the state department of health and of the prosecuting attorney of the county where any one violating the provisions of this act may reside, to prosecute all violations of the provisions of this act which shall come to their knowledge.

MICHIGAN PUBLIC HEALTH CONFERENCE

The Seventeenth Annual Michigan Public Health Conference will be held in Lansing, Nov. 10, 11 and 12 under the joint sponsorship of the Michigan Department of Health and the Michigan Public Health Association. Dr. C. C. Slemons, commissioner, and Dr. J. D. Brook, association president, join in extending a cordial invitation to all members of the health professions to attend the three-day conference.

State organizations holding their annual meetings in conjunction with the conference include the State Organization for Public Health Nursing, the Michigan School Health Association, Michigan Association of Sanitarians and the Michigan Association of Plumbing Inspectors.

Dr. John R. Heller, Jr., assistant surgeon, United States Public Health Service, will be one of the principal speakers at the opening session. He will

discuss the "Public Health Control of Syphilis." Other major topics to be included on the program include mental hygiene, school nursing, mouth hygiene, and the prevention of goiter in Michigan. Dr. Haven Emerson has been asked to address the conference on the topic, "The Place of the Physician in American Public Health."

Thursday afternoon will be devoted to round table sessions for health officers, nurses, sanitary officers, and dentists. The Friday morning session will include a discussion of communicable disease control measures. The Michigan School Health Association meets for its session on Friday afternoon.

It is expected that more than 1,000 members of the health profession will attend the conference this year. A registered attendance of 849 was recorded last year. Headquarters for the conference will be maintained at Hotel Olds.

MONTHLY INCIDENCE OF COMMUNICABLE DISEASES

Poliomyelitis receded during late September from the prominent position which it held so strongly in the public press this season. The number of reported cases this year promises to be considerably less than the total reported in 1935, but will exceed the incidence of 1936. However, there has been more newspaper publicity and more evidence of fear on the part of the public.

While poliomyelitis is receding, the season is here when diphtheria is on the increase. Diphtheria has been somewhat greater in prevalence this year than for several years. There is reason to believe that there will be a rather high peak during October, November and December. Physicians should be on the alert, realizing that the case fatality rate of diphtheria has not been lowered for a number of years. It depends in large part on two factors—the promptness in which the physician is called after first appearance of illness, and the promptness with which antitoxin is given.

The Michigan Department of Health makes every effort to keep an adequate supply of diphtheria antitoxin available to meet any emergency. It is available for every doctor in the state upon call. The quantity of antitoxin which must be kept in various places for emergency case use totals a large amount. Therefore, physicians are asked not to insist on large amounts being maintained with local distributors. Telegraph orders for diphtheria antitoxin will be sent any day of the week. Full-time health departments, wherever they exist, are used as distributors. Elsewhere certain hospitals and drug stores maintain a supply. The names of distributors in any locality can be obtained from the Michigan Department of Health.

It is suggested that physicians use more of the 20,000 unit syringes of diphtheria antitoxin rather than the 10,000 unit package. There is seldom a case which should receive less than 20,000 units therapeutically.

It is well for physicians to remind themselves that a case which is clinically indicative of diphtheria should be treated first and cultures submitted to the laboratory second.

The season for scarlet fever is also approaching. The incidence this year has been extremely high, and it is expected that the high rate will continue for some time.

During September there occurred an unusual number of malaria cases. Not all of the epidemiological data has been completed, but it appears that several cases can be directly attributed to Michigan mosquitoes. Cases have been reported from Kalamazoo, Van Buren, Saginaw, Oakland, Kent, Allegan and Ingham Counties.

Sporadic outbreaks of smallpox continue to oc-

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cur. The most recent one was reported from Branch County where four cases were diagnosed during September. The outbreak has been traced to a Monroe County contact. It was in that vicinity that the largest outbreak in recent history occurred last spring. Approximately 130 cases have since been attributed to that outbreak.

FELLOWSHIPS IN PUBLIC HEALTH ANNOUNCED

Fellowships for thirty Michigan physicians, nurses and other public health personnel for postgraduate training in public health at the University of Michigan and Wayne University have been announced by the Michigan Department of Health.

Dr. Harold Reif, Detroit; Dr. Philip Bourland, Grand Rapids; and Dr. J. K. Altland, Lowell, were awarded scholarships in the school of public health at the University of Michigan. The awards are made possible by grants to Michigan under the health provisions of the Social Security Act.

Nurses receiving two-semester scholarships at the University of Michigan include Emma Anderson, Marquette; Hilma Asikainen, Gwinn; Mrs. Fannie Johnson, Ironwood; Arda Muck and Dorothy Jenkins, Menominee; Mrs. Bessie Oakes, Flint; Isabell Quinlan, Sault Ste. Marie; Elizabeth VandenBosche, Detroit; Minnie Vollmart, Midland; Ina Young and Annette Fox, Albion; and Bertha Zagers, Fremont.

One-semester scholarships at Ann Arbor went to Ruth McLellan and Gertrude House, Kalamazoo; Alethea Fritz, Three Oaks; Pauline Knapp, Grand Rapids; Virginia Homer, Muskegon; Hazel Strom, Ironwood; Agnes Mitchell, Gladstone; and Vavolynn Brask, Highland Park.

Madge Bresnahan, Grand Haven, and Ermyl Manni, Grand Rapids, will receive two semesters

of training at Wayne University and Dorothy Nelson, Lawton, was awarded a one-semester scholarship. Mrs. Fern Welsh, Stanton, was awarded one semester of training at Peabody Institute.

Sanitarians receiving training awards at the University of Michigan include E. J. Friar of Manistee and Tom Laughlin of Iron Mountain. Grace Eldering, bacteriologist in the department laboratory at Grand Rapids, was granted a scholarship to continue her research work at Johns Hopkins University.

TUBERCULOSIS CONTROL PROGRAM

The tuberculosis control program which was developed by the Division of Tuberculosis, State Department of Health, is well underway in all full-time district, county and city health departments throughout the state.

The emphasis which the plan gives to the investigation of contacts of known cases is producing very satisfactory results in case finding. Also the standardization of procedure will soon provide comparable statistics for appraisal of the individual departments.

A public health nurse thoroughly trained in tuberculosis control has recently been added to the staff of the Division of Tuberculosis. The nurse will soon be available to teach a refined technic to the nurses on the staff of local full-time health departments.

HEALTH OFFICERS TRANSFER

Dr. A. B. Mitchell, director of the Bureau of County Health Administration, reports that Dr. T. E. Gibson, formerly of the Genesee County Health Department, has resigned to accept a similar position in charge of the Eaton County Health Department. Dr. Gibson will succeed Dr. J. W. Davis



Pure refreshment

who resigned recently to return to his home state. Succeeding Dr. Gibson in charge of the Genesee County Health Department will be Dr. L. V. Burkett, formerly director of the Midland County Health Department.

Dr. Hugh Robins, who has been associate director of the Calhoun County Health Department, has been made the new director of that department. Dr. M. R. Kinde, former director, will take up his new duties in the central offices of the W. K. Kellogg Foundation at Battle Creek.

The central office of the Ontonagon-Baraga District Health Department has been moved to Ontonagon, it has been announced. Dr. C. C. Corkill, director, formerly maintained his offices at L'Anse.

CONFERENCE ON BATHING PLACES

The Annual Michigan Conference on Bathing Places will be held on November 5, at Hotel Webster Hall in Detroit, it has been announced by the Bureau of Engineering. Sanitary phases of bathing and bathing places will be discussed by conference speakers. The complete program may be obtained upon request to the Bureau of Engineering, Michigan Department of Health, Lansing.

The Twelfth Annual Michigan Conference on Water Purification was held in Muskegon September 13, 14 and 15 with ninety-one filtration and sterilization plant operators in attendance. Conference speakers included John F. Norton, director of laboratories for the Upjohn Company, Kalamazoo; Charles H. Spaulding of Springfield, Ill.; Harry Jordan, secretary of the American Water Works Association; R. J. Faust and W. F. Shephard, Michigan Department of Health; and L. F. Oeming, sanitary engineer of the Michigan Stream Control Commission.

AUTOMOBILE DEATHS 28 PER CENT AHEAD OF 1936 TOLL

The mounting toll of deaths due to automobile accidents in Michigan is indicated in the 28 per cent increase in such deaths reported for the first eight months of this year. With the August total of 217 deaths, the highest monthly toll thus far this year, automobile deaths have reached 1,361, according to the Bureau of Records and Statistics. This is an increase of 296 deaths over the previous high figure recorded during this period in 1936. The automobile deaths for the year will probably be well over 2,000 if the present increase continues.

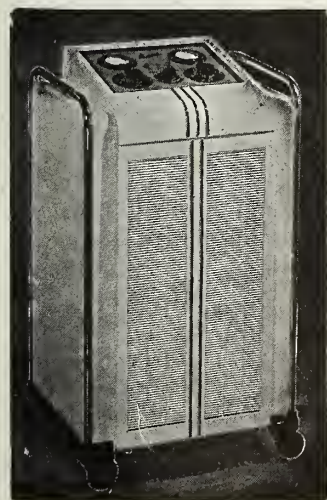
ANTENUPTIAL PHYSICAL EXAMINATION LAW

Physicians throughout the state have been circularized by the Michigan Department of Health as to the administration of the new Antenuptial Physical Examination Law Act No. 207, P.A. 1937. Copies of the law, a summary of administrative details, and the current list of registered laboratories where the required tests may be made were included in the circular letter.

It should be emphasized that physicians must obtain copies of the prescribed medical certificate through the clerk of the county wherein they reside. The certificates are supplied to all clerks free of charge by the Michigan Department of Health. No persons may obtain these certificates from the county clerk except licensed physicians. The patient, after successfully completing his physical examination, must sign the medical certificate in the presence of the examining physician.

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IN MEMORIAM

Dr. Harry T. Gray

Dr. Harry T. Gray of Alma, Michigan, is dead. He was the son of the late Dr. Robert A. Gray of Clare, Michigan. Dr. Gray was graduated from the University of Michigan and limited his practice to eye, ear, nose and throat specialty. Dr. Gray practiced in Owosso and Sault Ste. Marie before coming to Alma just six weeks ago. He is survived by his wife Rose and one son, also a brother, Dr. Frank R. Gray of Edmonton, Alberta, and a sister in Columbus, Ohio.

Dr. W. C. McCutcheon

Dr. W. C. McCutcheon died at his home in Cassopolis on October 1. He was stricken with a heart attack while in Grand Rapids attending the annual meeting of the Michigan State Medical Society. He was brought home and died the next day of angina pectoris. Dr. McCutcheon was born near Kingston, Ontario, in 1870. He was graduated from Queen's University, Kingston, Ontario, and in 1895 came to Cassopolis. He had been in practice there for forty-two years. Dr. McCutcheon was the co-founder of the McCutcheon-McNab Hospital in 1921. As well as being an active member of the state medical society, Dr. McCutcheon was a past master of the Backus Masonic Lodge and was a director of the Cass County State Bank. He is survived by his widow; a sister, Mrs. Laura Sinclair of Regina, Saskatchewan; and a brother, Dr. Charles McCutcheon.

Mr. Henry Kendall Mulford

Mr. Henry Kendall Mulford, well known in the field of pharmacy, died on October 15, 1937, at the age of seventy-one. Mr. Mulford was graduated from the Philadelphia College of Pharmacy, and started his career as proprietor of a retail drug store. In 1890, Mr. Mulford formed the H. K. Mulford Company, which firm manufactured pharmaceuticals. Mr. Mulford perfected and originated many pharmaceutical preparations, and was the first in this country to supply Diphtheria Antitoxin for use by the medical profession distributed by the pharmacists. In 1921, the Mulford Colloid Laboratories were established for the production of medicinal colloids. The degree of M.S. was conferred on Mr. Mulford by Lafayette College in 1918, and M.Ph. by the Philadelphia College of Pharmacy and Science in 1933.

The Future of Medicine: Chairman's Address

J. H. Musser, New Orleans (*Journal A. M. A.*, July 31, 1937), discusses the scientific, the economic and the educational future of medicine in the light of contemporaneous conditions. Scientifically medicine will undoubtedly progress. Economically and socially the future is less clear, but it can be safely assumed that the delights of accomplishment and the fascination of the problems of medicine will insure happiness to its practitioners. Educationally the future is bright. Undoubtedly many from a well trained group of men will take advantage of the facilities now existing and those to be established to qualify themselves as experts in limited fields of practice.

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◆ General News and Announcements ◆

The One Hundred Per Cent Club of the Michigan State Medical Society:

1. Alpena County Medical Society.
2. Branch County Medical Society.
3. Cass County Medical Society.
4. Clinton County Medical Society.
5. Eaton County Medical Society.
6. Gogebic County Medical Society.
7. Ingham County Medical Society.
8. Jackson County Medical Society.
9. Lapeer County Medical Society.
10. Lenawee County Medical Society.
11. Livingston County Medical Society.
12. Luce County Medical Society.
13. Manistee County Medical Society.
14. Menominee County Medical Society.
15. Muskegon County Medical Society.
16. Newaygo County Medical Society.
17. Northern Michigan Medical Society.
18. Oceana County Medical Society.
19. Ontonagon County Medical Society.
20. Schoolcraft County Medical Society.
21. Shiawassee County Medical Society.
22. Tuscola County Medical Society.

The above County Medical Societies have paid dues in full for each and every member of the County and State Medical Society. A number of other County Societies lack but a few, sometimes only one or two, of being One Hundred Per Cent. Have YOU paid your dues?

Council and Committee Meetings

1. October 17, 1937—Executive Committee of The Council—Hotel Statler—3:00 P. M.

* * *

Dr. C. L. Straith of Detroit is the author of an article appearing in the *Journal of The American Medical Association*, issue of September 18, entitled "Automobile Injuries."

* * *

Dr. L. G. Christian, Lansing, chairman of the Legislative Committee of the State Society, spoke to the Lansing Rotary Club on October 8. His subject was "The Basic Science Law."

* * *

Wm. J. Burns, executive secretary of the Michigan State Medical Society, addressed the Rotary Club of St. Johns, Michigan, on October 12. His subject was "The Help You Receive From the Medical Society."

* * *

Dr. Henry A. Luce of Detroit, president-elect of the Michigan State Medical Society, addressed the Rotary Club of Grand Rapids on September 30 in the Pantlind Hotel. Doctor Luce's subject was "What the Michigan State Medical Society Means to Your Community."

* * *

Dr. L. Fernald Foster, Bay City, secretary of the Michigan State Medical Society, is on the program of the Annual Conference of State Medical Society Secretaries which will be held in Chicago at the headquarters of the American Medical Association on November 19 and 20.

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GENERAL NEWS AND ANNOUNCEMENTS

The thanks of the Michigan State Medical Society is extended to Drs. A. M. Campbell of Grand Rapids, H. A. Furlong of Pontiac, Norman R. Kretzschmar of Ann Arbor, and Howard H. Cummings of Ann Arbor, who conducted the Postgraduate Course in Obstetrics in the Upper Peninsula of Michigan on October 8, 15, 22, and 29.

* * *

Dr. Morris Fishbein, editor of the *Journal of the American Medical Association*, was guest of the Bay County Medical Society, on Thursday, October 7. He addressed a meeting of the Woman's Auxiliary to the Bay County Medical Society at noon, and a public meeting, in the Wenonah Hotel, in the evening. His subject was "Changes in our Social Trend."

* * *

Dr. W. C. McCutcheon who attended the House of Delegates meeting as delegate from the Cass County Medical Society on Monday, September 27, in Grand Rapids, suffered a fatal heart attack at his home in Cassopolis on Friday, October 1. The sympathy of the whole Society is extended to the family of Dr. McCutcheon who served his County Medical Society and the State Medical Society for many years.

* * *

The fall postgraduate conference for Wayne County physicians is devoted entirely to tuberculosis, a subject in which all medical men and the entire community are interested. Meetings began on Wednesday, October 27, 1937, at 10:00 A. M. The postgraduate conferences on tuberculosis have been arranged to bring the best thought on the subject to Detroit physicians. A nationally known speaker will be presented at each meeting, and there will be opportunity for questions. There are also clinical demonstrations each morning.

The Council of the Michigan State Medical Society, at its annual meeting in Grand Rapids, September 26, 1937, discussed the advisability and the benefits to be derived from sending copies of all medical bills, as introduced into the Legislature, to the secretaries of component county medical societies—said copies to be sent by the Executive Office of the Michigan State Medical Society. The Council approved this service, and ordered that it be put into effect at the next regular and/or special session of the Legislature.

* * *

Paul B. Hoeber, Jr., has been appointed to succeed his father as manager of Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers. Mr. Hoeber, Jr., has been for several years technical assistant in the United States Employment Service in Washington, and also has sold the Hoeber line of medical books on the road. He attended Antioch College and the American University School of Public Affairs, Washington, D. C. The former policies of this firm will be continued.

* * *

Dr. H. M. Evans of the Institute of Experimental Biology, University of California, is announced as the speaker for the next Beaumont Series of Lectures, given each year by the Wayne County Medical Society. The date is March 28 and 29, 1938. Dr. Evans' general subject is "Anterior Pituitary Physiology." As in other years, a cordial invitation is extended by the Wayne County Medical Society to all members of the Michigan State Medical Society.

* * *

The Wisconsin State Medical Society, at its September, 1937, annual meeting in Milwaukee, approved a special assessment in the amount of \$10 per member for the ensuing year. "This assess-

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ment must be paid if a member is to remain in good standing." The regular annual dues in the State Society—\$15.00—will be maintained. The total dues and assessment for members of the Wisconsin Medical Society in 1938 will, therefore, be \$25.00.

The Wisconsin Society approved a survey of the entire state to determine the adequacy of medical care being given to the people.

The Society approved recommendation that its Secretary, Mr. J. George Crownhart, be sent to Europe to make a first hand study of health insurance.

The Society authorized a study of every phase of hospital insurance, and approved obtaining the service of expert statisticians and research workers.

* * *

Crippled and Afflicted Child Commitments for September, 1937

Crippled Child: Total of 266. Of the total number, 108 went to University Hospital, and 158 went to miscellaneous hospitals. From Wayne County (included in above totals): Total cases, 66. Of the sixty-six cases in Wayne County six went to University Hospital and sixty went to miscellaneous hospitals.

Afflicted Child: Total of 1,708 cases, of which 217 went to University Hospital and 1,491 went to miscellaneous hospitals. From Wayne County (included in above totals): Total cases, 484. Of the 484 cases in Wayne County, twenty-eight went to University Hospital and 456 went to miscellaneous hospitals.

* * *

Dr. George A. Sherman of Pontiac was the chairman of the Monday noon session of the Michigan Tuberculosis Association held at the Hotel Statler, Detroit, October 11. Those on the program included Dr. Bruce H. Douglas of Detroit, president of the Michigan Tuberculosis Association; Dr. Henry F. Vaughan, commissioner of health for Detroit; Dr. A. W. Newitt, director of the Tuberculosis Division of the Michigan Department of Health and Dr. J. L. Egle, superintendent of the hospital at Gaylord.

The meeting in Detroit was in celebration of the 30th Anniversary of the formation of the Michigan Tuberculosis Association.

Dr. Henry Cook of Flint, president of the State Society, Dr. Henry E. Carstens member of The Council, Detroit, and Executive Secretary, Wm. J. Burns, represented the Michigan State Medical Society at the meeting. Many members of the Wayne County Medical Society were also present.

* * *

Michigan Tuberculosis Association

A one-day convention of the Michigan Tuberculosis Association was held in conjunction with the Michigan Trudeau Society, the Michigan Sanatorium Association and the Wayne County Medical Society, at the Hotel Statler in Detroit, October 11. The principal speaker was Dr. J. Harley Williams, of London, England, medical commissioner for the National Association for the Prevention of Tuberculosis. His subject was fifty years of tuberculosis control in England, and he stressed the relationship of psychiatry to the control and cure of tuberculosis. Other speakers were Dr. Bruce H. Douglas, president of the Michigan Tuberculosis Association, Dr. Henry Vaughan, Health Commissioner of Detroit, Dr. A. W. Newitt, director of the tuberculosis division of the Michigan Department of Health and Dr. J. L. Egle, superintendent of Gaylord Sanatorium. Dr. Philip P. Jacobs of New York, a member of the executive committee of the National Tuberculosis Association, spoke at the banquet held in the evening. The December number of this JOURNAL will contain an article by Mr. Theodore Werle, Sec-

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retary of the Michigan Tuberculosis Association, dealing with the history of the movement up to and since its inauguration thirty years ago.

* * *

Postgraduate Day, University of Toledo

All members of the medical profession are cordially invited to attend the Fourth Annual Postgraduate Day presented by the Medical Institute of the University of Toledo on Friday, November 19, 1937. Dr. Frank H. Lahey and Dr. Lewis M. Hurxthal, both of the Lahey Clinic, Boston, will present a program dealing with thyroid diseases.

Three sessions are planned:

The morning program beginning at 10:00 A. M. in the Doermann Theatre, University of Toledo, will consist of a Clinical Discussion of Thyroid Diseases with presentation of cases by Dr. Lahey; Basal Metabolism—Blood Cholesterol—Myxedema and the Relationship of Obesity and Endocrine Disorders will be presented by Dr. Hurxthal.

The afternoon program, beginning at 2:00 P. M. in the same building, will include Thyroiditis—Recurrent Laryngeal Paralysis—Complications of Hyperthyroidism; hyperthyroidism and pregnancy; hyperthyroidism and tuberculosis; hyperthyroidism and diabetes; with a motion picture on Subtotal Thyroidectomy presented by Dr. Lahey; and Postoperative Tetany—Liver Function and the Blood in Thyroid Diseases, presented by Dr. Hurxthal.

The evening program will begin at 8:30 P. M. at the same location. Dr. Lahey will discuss The General Diagnosis and Management of Diseases of the Thyroid and of the Parathyroid. Dr. Hurxthal will speak on The Heart in Hyperthyroidism; the Heart in Myxedema.

There is no registration fee for this lecture series. You are invited.

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Graduate courses for training in the various phases of venereal disease control have been instituted by Western Reserve University, Cleveland, Ohio, under authority of the United States Public Health Service and the Ohio State Director of Health. They will be open without fees to health officers and to physicians coöperating with state and local health departments in the states of Ohio, Michigan, Indiana, Illinois, Wisconsin, Minnesota, Iowa, Missouri, Kansas, Nebraska, North Dakota and South Dakota, but the number who can be admitted is limited. The course may be entered at any time when a vacancy exists, usually for a duration of three or four months or longer. Visitors may also be admitted for shorter periods, if they can be accommodated.

The training will be informal and adapted to the individual needs of those taking the course. For example, to a clinician in a venereal disease clinic much clinical material is available and that portion of the training will be stressed. For the educator in a state health department, in addition to the clinical course, source material for talks to both lay and professional groups will be available and the student will be expected to prepare varied lectures. For the health department officials in addition to these features, case finding, case holding and morbidity reporting will be discussed more fully.

Physicians who desire to take these courses should apply through their State Health Department to the Ohio State Director of Health. Application blanks, if not already at hand, can be obtained by addressing Regional Consultant for the United States Public Health Service, Room 314, U. S. Court House, Chicago, Illinois.

The fall Postgraduate Conferences for physicians, sponsored by the Wayne County Medical Society, the Detroit Department of Health, and the Detroit Tuberculosis Sanatorium, will be devoted entirely to tuberculosis, a subject in which all medical men and the entire community are interested. Meetings will be held at Herman Kiefer Hospital, Detroit, beginning on Wednesday, October 27, 1937, at 10:00 A. M.

Great progress has been made in making Detroit tuberculosis conscious, largely through the participation of the physicians, but despite the progress, the battle to control tuberculosis has just begun.

The Postgraduate Conferences on Tuberculosis have been arranged to bring the best thought on the subject to Detroit physicians. A nationally known speaker will be presented at each meeting, and there will be opportunity for questions. There will also be clinical demonstrations each morning.

Among the prominent speakers scheduled for these conferences are Dr. Kendall Emerson, New York City, who will speak on "Present Trend in Tuberculosis" on October 27; Dr. Esmond R. Long, of Philadelphia, who will speak on "The Importance of Protecting the Child and the Young Person Against Tuberculosis," on November 3; Dr. J. N. Baker of Montgomery, Ala., will speak on "The Role of the Private Physician in Tuberculosis Case Finding," November 10; Dr. John B. Haws, II, Boston, will speak on "The Care of the Patient After the Sanatorium," November 17; Dr. Don Griswold, Albany, N. Y., will speak on "Factors in the Control of Tuberculosis," on December 1; and Dr. George G. Ornstein, New York City, will bring the final talk on December 8 on the subject "The Pathogenesis of Pulmonary Tuberculosis from the Physician's Point of View."

* * *

Highland Park Physicians' Club

The Twelfth Annual Clinic of the Highland Park Physicians' Club will be held on Wednesday, December 1, 1937, at the Nurses' Home of the Highland Park General Hospital, Highland Park, Detroit, Michigan. The complete program is: 8:30 to 9:30 A. M., Clinical Pathological Conference conducted by Wm. L. Brosius, M.D.; 9:30 to 10:30, The Use of Sulfanilamide in the Treatment of Gonococcal Infections: Further Investigations, by John E. Dees, M.D., Johns Hopkins University, Baltimore, Md.; 10:30 to 11:30, Fractures of the Spine, by Kellogg Speed, M.D.; 11:30 to 12:30, Surgical Lesions of the Colon, by C. F. Dixon, M.D., Mayo Clinic; 12:30 to 2:00 P. M., Address of Welcome by the Mayor of Highland Park, and complimentary luncheon by the Highland Park General Hospital; 2:00 to 3:00, Puerperal Sepsis, by A. E. Lash, M.D., University of Illinois, Chicago, Ill.; Deep Infections of the Neck, by S. Iglauer, M.D., University of Cincinnati, Cincinnati, Ohio; Diabetes Mellitus, by I. Rabinowitch, M.D., McGill University, Montreal, Canada.

At 7:00 P. M. the annual banquet will be held at the Statler Hotel. Wm. J. Burns, secretary of the Michigan State Medical Society, will be the toastmaster of the evening and the after-dinner speaker will be I. Rabinowitch, M.D., who will speak on his recent trip into the North on a medical study of disease among the Eskimos.

* * *

Wayne University Medical Appointments

The following are the new appointees for 1937-1938 to the staff of the Wayne University College of Medicine. The asterisks indicate part-time teachers.

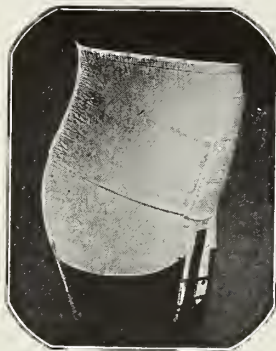
Arthur H. Smith, Ph.D.—Professor of Physiological Chemistry, and Head of Department, Formerly Associate Professor of Physiological Chemistry, Yale University.

Gabriel Steiner, M.D.—Research Professor of Neurology

NOVEMBER, 1937

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and Neuropathology. Formerly Professor of Histo-Pathology and Chief of the Neurological Clinic, University of Heidelberg.

*Loren W. Shaffer, M.D.—Professor of Dermatology and Syphilology.

*Parker Heath, M.D.—Professor of Ophthalmology.

*Don M. Gudakunst, M.D.—Professor of Preventive Medicine and Public Health, Chairman of the Division. (Deputy Commissioner of Health, City of Detroit.)

*Carey McCord, M.D.—Professor of Industrial Hygiene, (Head of Bureau of Industrial Hygiene, Department of Public Health, City of Detroit.)

*Henry Vaughan, M.D.—Professor of Public Health Administration and Commissioner of Health, City of Detroit.

James M. Winfield, M.D.—Associate Professor of Surgery, Formerly Instructor in General Surgery, University of Pennsylvania.

James L. Wilson, M.D.—Associate Professor of Pediatrics. Formerly Associate in Pediatrics, Harvard Medical School.

Richard M. Johnson, M.D.—Assistant Professor of Medicine. Formerly Instructor in Internal Medicine, University Hospital, University of Minnesota.

Arthur J. Derbyshire, Ph.D.—In charge of Neuro-anatomy —Assistant Professor of Anatomy. Formerly Instructor in Physiology, Ohio State University.

James M. Orten, M.D.—Assistant Professor of Physiological Chemistry. Formerly Charles Pfizer Company Fellow, Yale University.

*William M. Witheridge, M.D.—Assistant Professor of Industrial Hygiene and Occupational Diseases. (Member of Bureau of Industrial Hygiene, City of Detroit.)

Ralph G. Janes, Ph.D.—Instructor in Histology and Embryology. Formerly Instructor in Biology, New York University.

Arthur W. Frisch, M.D., Ph.D.—Instructor in Bacteriology. Formerly Graduate Research Assistant, University of Wisconsin.

There were eight Teaching Fellows in the Basic Medical Sciences and four in Clinical Specialty Department appointed for 1937-1938.

CONVENTION ECHOES

The registration of physicians (members of the Michigan State Medical Society) at the 72nd Annual Meeting of the M.S.M.S. in Grand Rapids, was 1,138. Add to this the guests, wives of physicians, and exhibitors, and the total registration was 1,894.

* * *

Dr. S. C. Mason of Menominee was one of the first physicians to arrive in Grand Rapids for the Meeting. He entrained from Menominee for Milwaukee Saturday night, and flew across Lake Michigan Sunday morning in order to be in time for the golf tournament. A number of other physicians from the Upper Peninsula traveled by plane to the Convention.

* * *

Dr. Thomas G. Hull, Director of Scientific Exhibits of the A.M.A., took full charge of the scientific exhibit and talking picture on "Syphilis." The A.M.A.—U. S. Public Health Service talkie called "The Diagnosis and Treatment of Syphilis" was shown at 11:30 a. m. and at 4:30 p. m. daily during the convention. The American Medical Association is sincerely thanked for loaning the specialized services of Dr. Hull to the M.S.M.S. for four days.

* * *

The new badge designed for the Michigan State Medical Society annual meeting this year was especially attractive to our out-of-state guest speakers, particularly Dr. Thomas Parran, Jr., Surgeon General of the United States Public Health Service.

* * *

Nine hundred seventy-five inches of copy were published in the newspapers of Michigan relative to

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the 72nd Annual Convention of the Michigan State Medical Society. Dr. J. Dunne Miller of Grand Rapids headed a very efficient Press Relations Committee, to which credit must be given for the splendid press notices on the convention activities.

Among the newspapermen who covered the meeting were Lawrence C. Salter of the *Detroit Free Press*; Allen Shoenfield of the *Detroit News*; R. G. Brown of the *Grand Rapids Press*; Herbert Hall of the *Associated Press*; Hugh Lago of the *Grand Rapids Herald*; and John McGinnis of the *Grand Rapids Press*.

* * *

"I never before attended a Michigan State Medical Society convention until the Grand Rapids meeting", states one Michigan physician. "However, I'll never stay away from another meeting. I had a wonderful time. I met a lot of World-War buddies, a number of fellows from my class, picked up a number of grand ideas from some of the papers I heard, bought some new equipment which I should have had in my office four or five years ago, in the exhibit, and existed for three days on about as little sleep as ever before in my life (including my days at the Front). Count me in on every M.S.M.S. convention from here on."

* * *

"Clinical Medicine and Surgery," through its publisher—the Associated Trade Press, 9 S. Kedzie Avenue, Chicago—states that it will honor all orders for subscriptions secured in Grand Rapids by its former agent, Mr. S. E. Stone. Any physician who has cause for complaint in connection with subscription to "*Clinical Medicine and Surgery*", made in Grand Rapids in September, is invited to communicate with the Michigan State Medical Society's Executive Office, 2020 Olds Tower, Lansing.

* * *

The Coca-Cola Company distributed 1,448 bottles of Coca-Cola at the recent convention of the Michigan State Medical Society.

* * *

Dr. Grover C. Penberthy served as chairman of the Third General Assembly on Wednesday, September 29 at 9:30 a. m.

* * *

Dr. Angus McLean, Detroit, acted with Dr. Andrew P. Biddle as co-chairman of the Second General Assembly at the Grand Rapids Convention, Tuesday, September 28 at 8:00 p.m.

* * *

Auditor General Gundry was represented at the Secretaries Conference by Messrs. Geo. A. Corrigan and Eugene O. Edmunson. The Crippled Children Commission was represented by Commissioner H. B. Fenech, M.D., and by Mr. Harry H. Howett, Executive Secretary.

* * *

Dr. George P. Reynolds of Boston, one of the guest speakers on the program of the M.S.M.S. at the Grand Rapids meeting, writes: "I was very much impressed by your meeting, the percentage of attendance, and particularly the really impressive audience that listened to the papers on the last afternoon of a three-day meeting."

From the very first lecture in the Civic Auditorium on Tuesday until the last speaker finished at 5:00 p.m. on Thursday, row upon row in the auditorium was filled with eager listeners. It was a great three-day postgraduate opportunity, and hundreds of Michigan physicians took good advantage of it.

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AMONG OUR CONTRIBUTORS

Dr. W. C. Behen was graduated from the University of Pennsylvania School of Medicine in 1917, and took postgraduate work at the University of Vienna in 1919 and postgraduate work in eye, ear, nose and throat at the University of Pennsylvania School of Medicine from 1921 to 1923. Dr. Behen is a member of the American Academy of Ophthalmology and Otolaryngology and is on the staff of the eye, ear, nose and throat department of the Sparrow Hospital, Lansing.

* * *

Richard C. Connelly, B.S., M.D., was graduated from St. Louis University School of Medicine in 1924. He attended the Graduate School of Medicine, University of Pennsylvania, in 1935. He served as intern at St. John's Hospital, St. Louis, Missouri, Detroit Receiving, and Herman Kiefer Hospitals. He is an instructor in clinical medicine at Wayne University School of Medicine, member of the staff of the Out-Patient Department of Harper Hospital in the gastro-intestinal clinic, and consultant in gastroenterology, Herman Kiefer Hospital.

* * *

Dr. L. E. Himler was graduated from the University of Michigan Medical School in 1931. He was instructor in neurology at the University Hospital from 1933 to 1935 and is at present assistant psychiatrist at the University of Michigan.

* * *

Dr. Elliott P. Joslin was graduated from Yale University in 1890 and from Harvard Medical School in 1895. He is Clinical Professor Emeritus of Medicine of the Harvard Medical School, and is Medical Director of the George F. Baker Clinic of the New England Deaconess Hospital, Boston.

* * *

Dr. W. H. MacCraken was graduated from the University of Louisville School of Medicine in 1903. He came to Detroit in 1919 as Professor of Pharmacology and Therapeutics in the Detroit College of Medicine and Surgery, now the Wayne University College of Medicine, which position he still holds. Dr. MacCraken is also Dean Emeritus of the Wayne University College of Medicine.

* * *

Dr. C. S. O'Brien was graduated M.D. from Indiana University in 1913. He is professor and head of the Department of Ophthalmology, University of Iowa, and his practice is limited to ophthalmology.

* * *

Dr. W. H. Riley was graduated from the Medical Department of the University of Michigan in 1886, and has since taken postgraduate work in this country and Europe. From 1896 to 1902, he was professor of mental and nervous disease in the

University of Colorado and he has been chief of the department of Neuropsychiatry in the Battle Creek Sanitarium for the last thirty-five years.

He is a fellow of the following societies: American College of Physicians, American Psychiatric Association, American Medical Association, Society for Research in Mental and Nervous Disease, New York, The Central Neuropsychiatric Association, the Detroit Society of Neurology and Psychiatry.

* * *

Dr. Sarah S. Schooten was graduated from the Wayne University College of Science in 1924 and College of Medicine in 1926. Her internship was spent at Providence Hospital, Detroit, where she was also resident in the Department of Pediatrics from 1926 to 1928. She was associate in the Department of Epidemiology in the Detroit Department of Health from 1930 to 1933. She has been physician to the Convalescent Serum Clinic since 1932. Her practice is limited to pediatrics.

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THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

A DIABETIC MANUAL. For the Mutual Use of Doctor and Patient. By Elliott P. Joslin, M.D., Clinical Professor of Medicine, Harvard Medical School; Medical Director George F. Baker Clinic at the New England Deaconess Hospital; Consulting Physician, Boston City Hospital, Boston, Massachusetts. Sixth edition, thoroughly revised, illustrated. Lea & Febiger, Philadelphia, 1937.

A PRACTICAL TREATISE ON DISEASES OF THE SKIN. For the use of Students and Practitioners. By Oliver S. Ormsby, M.D., Clinical Professor of the Department of Dermatology, Rush Medical College; Dermatologist to the Presbyterian and St. Anthony's Hospitals, and the Home for Destitute Crippled Children; Consulting Dermatologist to Orphan Asylum of the City of Chicago. With revisions of the Histopathology and Mycology by Clark Wylie Finnerud, B.S., M.D., Assistant Clinical Professor of Dermatology, Rush Medical College. Fifth edition, thoroughly revised, illustrated with 658 engravings and 3 colored plates. Lea & Febiger, Philadelphia, 1937.

CRIPPLED CHILDREN. Their Treatment and Orthopedic Nursing. By Earl D. McBride, B.S., M.D., F.A.C.S., Assistant Professor of Orthopedic Surgery, University of Oklahoma, School of Medicine; Attending Orthopedic Surgeon to St. Anthony Hospital; Associate Orthopedic Surgeon to Oklahoma City General and Wesley Hospitals, in collaboration with Winifred R. Sink, A.B., R.N., Educational Director, Grace Hospital School of Nursing, Detroit. Second edition, St. Louis, The C. V. Mosby Company, 1937. Price—\$3.50.

METHODS OF TREATMENT. By Logan Glendening, M.D., Clinical Professor of Medicine, Medical Department of the University of Kansas; Attending Physician, University of Kansas Hospitals; Consulting Physician, Kansas City General Hospital; Physician to St. Luke's Hospital, Kansas City, Missouri. With Chapters on Special subjects by H. C. Andersson, M.D.; Ursulla Brunner, R.N.; J. B. Cowherd, M.D.; Paul Gempel, M.D.; H. P. Kuhn, M.D.; Carl O. Rickter, M.G.; F. C. Neff, M.D.; E. H. Skinner, M.D.; E. R. DeWeese, M.D., and O. R. Withers, M.D. Sixth edition. St. Louis, The C. V. Mosby Company, 1937. Price, \$10.00.

THE MANAGEMENT OF FRACTURES, DISLOCATIONS AND SPRAINS. By John Albert Key, B.S., M.D., Clinical Professor of Orthopedic Surgery, Washington University School of Medicine; Associate Surgeon, Barnes Children's, and Jewish Hospitals, and H. Earle Conwell, M.D., F.A.C.S., Consulting Orthopedic Surgeon to the Tennessee Coal, Iron & Railroad Company and the Orthopedic and Traumatic Services of Employees' Hospital. Second edition, St. Louis, The C. V. Mosby Company, 1937. Price, \$12.50.

NEUROLOGY. By Roy R. Grinker, M.D., chairman of the Department of Neuropsychiatry of the Michael Reese Hospital, Chicago. Formerly Associate Professor of Neurology and Psychiatry, The University of Chicago. Second edition. Springfield, Illinois and Baltimore, Maryland; The Charles C. Thomas Publishers. 1937. Price, \$8.50.

CLINICAL HEART DISEASE. By Samuel A. Levine, M.D., F.A.C.P., Assistant Professor of Medicine, Harvard Medical School; Senior Associate in Medicine, Peter Bent Brigham Hospital, Boston; Consultant Cardiologist, Newton Hospital; Physician, New England Baptist Hospital, Boston. 445 pages with 97 illustrations. Philadelphia and London: W. B. Saunders Company, 1936. Cloth, \$5.50 net.

SYNOPSIS OF GENITO-URINARY DISEASES. By Austin I. Dodson, M.D. F.A.C.S., Richmond, Virginia, Professor of Genito-urinary Surgery, Medical College of Virginia; Genito-urinary Surgeon to the Hospital Division, Medical College of Virginia; Genito-urinary Surgeon to Crippled Children's Hospital; Urologist to St. Elizabeth's Hospital; Urologist to St. Luke's Hospital and McGuire Clinic. Second edition, with 112 illustrations. St. Louis: The C. V. Mosby Company, 1937. Price, \$3.00.

THE THINKING BODY, A STUDY OF THE BALANCING FORCES OF DYNAMIC MAN. By Mabel Elsworth Todd, New York, N. Y., foreword by E. G. Brackett, M.D., Boston, Mass. 91 illustrations, 314 pp. Paul B. Hoeber, Inc., New York, 1937, \$4.00.

The author of this work, impressed with the integrative and correlative character of the neuromuscular mechanism of the body, has attempted to explain the method by which the body adapts itself to posture and motion. It is not a highly technical work, and most of the references are to such standard sources as Starling's Physiology and Piersol's Anatomy. Chatty, exuberant, involved at times, and repetitive, the book points out marvelous body mechanisms. Often exercises and advice are suggested.

According to the preface, "The ideas expressed in this book have been derived from more than thirty year's experience in teaching bodily economy, and the work is an elaboration of a classroom syllabus prepared in 1929."

CLINICAL PSYCHIATRY—PRINCIPLES AND PRACTICE. By Morris Braude, M.D. P. Blakiston's Son & Co., Inc.

A book, well bound, of convenient size for study and a contribution to a subject which is assuming greater importance each day. At first, one is awed by the command of language of the author, but the awe soon gives way to admiration and one recognizes that the book has literary as well as scientific value. The author recognizes the psycho-analytic approach to the problems while at the same time feels that the last word has not been said. The book is commended to students of the subject and is well worth slow and careful perusal.

CULLED BY THE SCISSORS

* * *

"Horace is going to teach me to play cards, so that I'll know all about it after we are married," gushed the sweet young thing.

"Isn't that fine and thoughtful of him!" exclaimed her mother.

"What game is he going to teach you?"

"I think he called it Solitaire."

* * *

Revenge—it was late when the hostess at the reception requested the famous basso to sing.

"It is too late, madam," he protested. "I should disturb your neighbors."

"Not at all," declared the hostess. "Besides, they poisoned our dog last week."—Vancouver Sun.

* * *

Through the kindness of Don McIntyre, who got it from *The Fidelity Herald*, Benton Harbor, we submit the following gem on germs: (We got it from the *Jackson County Medical Bulletin*.)

Dangerous Dan McCrobe

A bunch of germs were hitting it up

In the bronchial saloon;

Two bugs on the edge of the larynx

Were jazzing a rag-time tune.

Back in the teeth, in a solo game,

Sat dangerous Ask-Kerchoo;

And watching his pulse was his light of love—

The lady that's known as Flu.

* * *

Force of Habit—Flossie: "You'll never catch me going out to dinner with an editor again."

Roberts: "Was he broke?"

Flossie: "I don't know whether he was broke or not, but he put a blue pencil through about half of my order."—Niagara Falls Review.

Intensive Case Finding Work in Tuberculosis

HENRY F. VAUGHAN and BRUCE H. DOUGLAS, Detroit (*Journal A. M. A.*, Sept. 4, 1937), point out that, briefly stated, the task in tuberculosis control is, first, to find the minimal case and, second, to isolate the infectious case, preferably in a hospital or sanatorium, unless this can be done under suitable home conditions. To do this involves the more effective utilization of facilities which usually are available or can readily be made available in every community. Money may be lacking; however, with state and federal assistance, this handicap can be overcome. As a matter of fact, from the point of view of economics, it must be overcome. No one may be interested in saving human lives, in reducing the death rate from tuberculosis, in expanding the life span or even in bettering the happiness of our fellow beings, but every one is interested in saving tax money. Spending \$200,000 to save a million dollars annually is impressive. It was on that basis that Detroit so effectively sold its tuberculosis case-finding program that not one word of objection was offered from any source. Following the special newspaper stories and radio dramas, in December 1936 the city council authorized the department of health to add approximately \$200,000 per annum to its annual budget to be used exclusively for tuberculosis case finding work. By February 1, public health nurses began a house-to-house canvass in areas of high mortality. Even before the start of the field work, as a result of the newspaper and radio publicity, 2,000 tuberculin tests had been recorded by the cooperating physicians. Since February 1 (and prior to May 21) there had been recorded with the health department 33,367 tuberculin tests, of which 7,472, or 22 per cent, were positive. Of this group 5,122, or 69 per cent, had completed the x-ray study and in the latter group

there had been discovered 242 new active cases of tuberculosis. This means that about 0.75 per cent of the persons examined (at all ages) was found to have active tuberculosis. Of particular significance is the fact that 43 per cent of these new cases of tuberculosis have been classified as minimal. While there are other important groups, such as school children of a selected age or grade, employees in industrial plants, food handlers, prenatal cases, diabetic patients and those who are recovering from acute infections, it was deemed advisable to undertake the case-finding work first in those groups in which the largest number of suspects and cases would be likely to be found. Within two months after the inauguration of the intensive educational work by the public health nurses in the visited group of families in the area of high mortality, 30 per cent of the Negroes (including all ages) had gone to their physician and reports had come through to the health department on the results of the tuberculin tests. Proportionately, only one-third as many white persons had responded; that is, 10 per cent of the members of the families visited. It is believed that these results obtained in the brief period of two months show a most encouraging response.

Sandy joined a golf club and was told by the professional that if his name was on his golf balls and they were lost, they would be returned to him when found.

Sandy—Good, put my name on this ball.

The professional did so.

Sandy—Would you also put M.D. after it? I'm a doctor.

The professional obeyed.

Sandy—There's just one thing more. Can you squeeze "Hours 10 to 3" on as well?

How to choose your food for maximum health qualities

The major portion of the book is concerned with setting down, in simple, unequivocal statements, the most up-to-date and generally recognized truths of what is now known about diet. It shows how to select foods so as to avoid deficiencies in the diet and to obtain from them the maximum qualities for health and for growth that various food substances are able to provide.

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Editor, Journal of the American Medical Association

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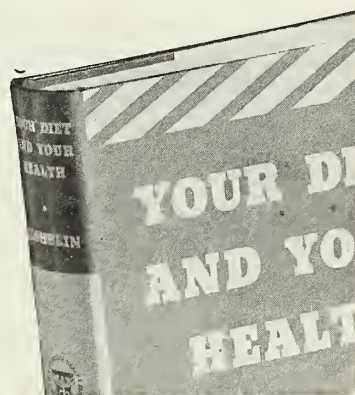
The book gives full discussions of the proportions of protein, carbohydrate, fat recommended; the value and use of minerals; the real importance of the much-touted vitamins; the merits of the various weight-reduction diets, and many other topics. There are also special sections on suggested diets; food "sensitivities"; and in general much good common sense on a subject which has been peculiarly obscured by fads.

A number of tables giving food values, calorie content of various foods, vitamin sources, minimum diets, food values of alcoholic beverages, etc., have been included.

Dr. Fishbein says:

"As a result of our new knowledge, children are growing bigger and taller and weigh more than did their ancestors in previous generations. We know that it is possible to make them live a little longer. That is certainly more than enough to warrant widespread dissemination of the truth about diet."

Send orders to the Executive Office, 2020 Olds Tower, Lansing, Mich.



Chapter Headings

Your Calories	Diets for Children
The Cost of Food	Special Diets
Hunger and Appetite	Diet and Weight
Digestion	Food Sensitivities
Debunking Diets	Diets in Disease
Peculiar Schools of Dieting	Conditions
Protein	Milk and Milk Products
Carbohydrates	Bread
Fats	Wheat
Water	Fish
Mineral Salts	Vegetables
The Vitamins	Fruits
Facts About Food	Miscellaneous Foods
	Conclusion

COUNTY SOCIETIES

BRANCHES OF THE MICHIGAN STATE MEDICAL SOCIETY

COUNTY SOCIETY	PRESIDENT	SECRETARY	MEETINGS	
			Regular	Annual
Allegan	G. H. RIGTERINK Hamilton	M. B. BECKETT Allegan	1st Tuesday	1st Tuesday December
Alpena-Alcona- Presque Isle.....	DR. C. A. CARPENTER Onaway	HAROLD KESSLER Alpena	Last Thursday 6:00 p. m.	Last Thursday December
Barry	H. S. WEDEL Freeport	G. F. FISHER Hastings	2nd Thursday 8:00 p. m.	1st Thursday January
Bay-Arenac-Iosco- Gladwin	DR. A. D. ALLEN Bay City	A. L. ZILIAK Bay City	2nd and 4th Wednesday (ex- cept July, Aug., Sept.) 6:00 p. m.	2nd Wednesday December
Berrien	C. S. EMERY St. Joseph	A. F. BLIESMER St. Joseph	2nd Wednesday or Thursday	2nd Wednesday or Thursday, December
Branch	BERT W. CULVER Coldwater	F. S. LEEDER Coldwater	3rd Thursday 6:30 p. m.	3rd Thursday December
Calhoun	C. W. BRAINARD Battle Creek	WILFRID HAUGHEY Battle Creek	1st Tuesday (except July and Aug.)	1st Tuesday December
Cass	S. E. BRYANT Dowagiac	K. C. PIERCE Dowagiac	2nd Wednesday or Thursday	December 15
Chippewa- Mackinac	F. J. MOLONEY Sault Ste. Marie	GEO. A. CONRAD Sault Ste. Marie	1st Friday	1st Friday December
Clinton	A. C. HENTHORN St. Johns	T. Y. HO St. Johns	1st Tuesday 7:30 p. m.	1st Tuesday October
Delta	H. O. GROOS Escanaba	G. W. BENSON Escanaba	1st Thursday 8:30 p. m.	December 2
Dickinson-Iron	D. R. SMITH Iron Mountain	W. H. HURON Iron Mountain	1st Thursday 6:30 p. m.	1st Thursday December
Eaton	H. A. MOYER Charlotte	THOMAS WILENSKY Eaton Rapids	Last Thursday	No set date
Genesee	ALVIN N. THOMPSON Flint	C. W. COLWELL Flint	2nd and 4th Tuesday (except July and August)	2nd Tuesday November
Gogebic	C. C. URQUHART Ironwood	F. L. S. REYNOLDS Ironwood	3rd Tuesday	3rd Tuesday December
Grand Traverse- Leelanau-Benzie ..	DWIGHT GOODRICH Traverse City	E. F. SLADEK Traverse City	1st Tuesday 8:00 p. m.	1st Tuesday December
Gratiot-Isabella- Clare	KENNETH P. WOLFE Breckenridge	RICHARD L. WAGGONER St. Louis	3rd Thursday	3rd Thursday December
Hillsdale	W. E. ALLEGER Pittsford	E. G. McGAVRAN Hillsdale	Last Thursday	Last Thursday December
Houghton-Baraga- Keweenaw	L. E. COFFIN Painesdale	C. A. COOPER Hancock	1st Tuesday	1st Tuesday January
Huron-Sanilac	F. O. KIRKER Sandusky	E. W. BLANCHARD Deckerville	2nd Thursday	2nd Thursday December
Ingham	MILTON SHAW Lansing	R. J. HIMMELBERGER Lansing	3rd Tuesday 6:30 p. m.	3rd Tuesday December
Ionia-Montcalm	L. E. KELSEY Lakeview	JOHN J. McCANN Ionia	2nd Tuesday 7:00 p. m.	2nd Tuesday December
Jackson	E. D. CROWLEY Jackson	H. W. PORTER Jackson	3rd Tuesday 6:30 p. m.	3rd Tuesday December
Kalamazoo- Van Buren	W. G. HOEBEKE Kalamazoo	L. W. GERSTNER Kalamazoo	3rd Tuesday 7:30 p. m.	3rd Tuesday December
Kent	A. B. SMITH Grand Rapids	J. M. WHALEN Grand Rapids	2nd and 4th Wednesday 8:15 p. m.	2nd Wednesday December
Lapeer	H. M. BEST Lapeer	CLARK DORLAND Lapeer	2nd Thursday	December or January
Lenawee	A. W. CHASE Adrian	ESLI T. MORDEN Adrian	3rd Tuesday	3rd Tuesday December
Livingston	H. L. SIGLER Howell	DUNCAN C. STEPHENS Howell	1st Friday 6:30 p. m.	1st Friday December
Luce	GEO. F. SWANSON Newberry	A. T. REHN Newberry	1st Tuesday 8:00 p. m.	1st Tuesday December
Macomb	JOSEPH N. SCHER Mt. Clemens	R. F. SALOT Mt. Clemens	1st Monday 12:00 noon	1st Monday December
Manistee	KATHRYN BRYAN Manistee	C. L. GRANT Manistee	Every Monday noon	3rd Thursday January
Marquette-Alger	E. R. ELZINGA Marquette	D. P. HORNBOKEN Marquette	No set date	December
Mason	W. S. MARTIN Ludington	CHAS. A. PAUKSTIS Ludington	No set time	No set time
Mecosta-Osceola ...	THOMAS P. TREYNOR Big Rapids	GLENN GRIEVE Big Rapids	2nd Tuesday	2nd Tuesday December

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MATERNAL MORTALITIES*

GEORGE KAMPERMAN, M.D., F.A.C.S.

DETROIT, MICHIGAN

President Ruthven, Members of the Board of Regents, Members of the Faculty, Students, and Guests:

It is with great humility that I occupy this place on this program today. Particularly am I conscious of this when I reflect on the men who have occupied this position on previous occasions. I cannot but think of the convocation thirty-four years ago, when as members of the Freshman Class in 1903, we were the first to occupy the seats in what was then the New Medical Building. And that building is now the Old Medical Building. What we revered as the Old Medical Building, with its beautiful columns, and its rickety old stairways, which creaked under the impact of class rushes, has now in the course of progress been removed. Progress knows no sentiment.

Personalities as well as buildings change. During these years Faculties have gone and been replaced, University governing bodies and officials have changed. But in spite of all these changes the University and the Medical School have remained and are essentially the same. We must acknowledge that years cause some change. Without much thought, alumni often express the opinion that to them things seem not as they used to be. But who could expect in this era of rapid change that a great and progressive university would stand still?

Alumni, like other individuals, are hero worshipers. They worship not only heroes, but ideas. We must bear with older alumni in their unthinking loyalty and enthusiasm. One must keep this in mind when one hears older University days discussed with a pessimistic voice about the present as well as the

future. It is inferred that in former days we had a grand old Faculty, and it is intimated that the Medical School is now being manned and directed by a group of younger men. This pessimistic viewpoint may be the outcome of sheer loyalty without much thought exercised, for alumni are not always profound thinkers. It is pointed out that we of the older alumni had as our Faculty stalwarts like Vaughan, Huber and Novy, Warthin and Lombard, Dock, Peterson, and deNancrede, and other men of equal standing and age. But these men were here thirty-four years ago, and had been here for considerable time prior to that. To the older alumnus it seems these stalwarts never had any youthful years. But deduct these passing years from the ages of these men, and we discover we had after all a very young Faculty. Our present youthful Dean can perhaps boast, or confess, of as many years as these stalwarts of former days. The fact is that the Medical School now has a Faculty comparable to the youthful faculty of thirty-four years ago. And the great strength of the Medical School lies

*Read at the opening of the University of Michigan Medical School, September 27, 1937.

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in the fact that these Faculty members can be chosen during their early productive years and at such an age that the University may receive from them a lifetime of service. We hail the men who can be so outstanding early in life as to warrant positions on the faculty of our beloved Medical School. All hail to the present Faculty! We have faith that under the present leadership the Medical School will not only hold its own, but will constantly forge ahead and keep abreast of all that is good, fundamental, and lasting in medical education.

I cannot but recall one incident that occurred on this same occasion in 1903. As an unofficial part of the program, Dean Vaughan introduced to the assembled audience, the "boy professor," the Freshman of the Faculty. He had just recently assumed his duties at the University, and in my mind I can still see how he appeared in the amphitheater, with a cockiness that we learned so to admire. And in his short impromptu discussion Dr. Canfield confessed that he had come to learn rather than to teach. The true teacher, he emphasized, must first be a student. And he challenged any medical student to learn more than he would learn.

I have chosen to present to you on this occasion an obstetric problem that for some time has been provocative of a great deal of discussion. I refer to maternal mortalities, and particularly the failure of obstetrics as practiced to reduce these mortalities.

A great many investigations and studies of maternal mortalities have been made. The study that has been the most impressive and has caused the greatest stir in obstetric circles is the analysis of puerperal deaths recently made in New York City. This study was made under the direction of the New York Academy of Medicine and constituted an analysis of all maternal deaths in New York City during the years 1930, 1931, and 1932. The committee undertaking the study investigated each death immediately after the death certificate had been filed with the Board of Health. In this way they were able to contact the attendants involved while the details were still fresh in mind. By a frank statement of the aims of the study, coöperation was obtained from all physicians, midwives, nurses, and hospital attendants. This committee tried not only to

appraise the causes of maternal deaths, but to estimate in each case as to whether the death might have been prevented.

I might interject here the statement that this study was prompted by the fact that, while death rates from many diseases had been reduced, the mortality associated with childbirth had remained stationary. Since the work of Oliver Wendell Holmes in 1842, and that of Semmelweiss in 1847, there has been very little improvement in mortality rates.

We are reminded further that the United States occupies an unenviable position in maternal death statistics by standing fourteenth in the rank of mortalities. This would on the face of it mean that thirteen countries have better records than we have. In this list, Holland has the lowest death rate (2.4 per 1,000), and the United States stands fourteenth (6.6 per 1,000).

In defense of all this, the fact is cited that great variations exist in the recording of vital statistics. It is said that for this reason comparisons, especially international comparisons, are hardly valid, and perhaps unjust.

As an example to show how carefully vital statistics should be analyzed before deductions are made, we may cite the fact that during the year 1935 there were 129 puerperal deaths in the city of Detroit. On first thought one would infer that these women had sacrificed their lives in the effort to give birth to their children. On careful analysis we find, however, that about 28 per cent of these patients died as a result of abortion, in nearly all cases criminally and illegally induced. Furthermore, about 11 per cent of these puerperal deaths were due to ectopic gestation. And approximately 12 per cent died of extra-*puerperal* causes. By this latter, we refer to patients who during pregnancy die of some intercurrent disease, such as pneumonia and other infectious diseases. However, because a pregnancy exists, the death is recorded as a *puerperal* death. By thus analyzing these statistics, one learns that about 51 per cent of these patients did not even deliver a baby. To the lay mind a *puerperal* death is usually considered one associated with the attempt to deliver a child. Vital statistics are recorded on a somewhat different basis, and not only various countries have different standards,

but they even vary in different states. This variation in standards makes comparisons difficult. These statements are not intended to be an alibi for the higher maternal mortality in this country. They simply illustrate methods of assignment of causes of death.

Let us not be lulled into a too comfortable state of mind concerning maternal mortalities by such statistics as we have just quoted. While such figures throw light on methods of classification, we must not be led into thinking that only in the United States are vital statistics recorded thus. Standards, after all, vary only slightly in various countries. To ascertain how different methods of recording vital statistics may influence our relative position, the National Bureau of Statistics sent copies of 1,073 death certificates to twenty-four foreign countries for classification of the causes of death. Sixteen countries complied with the request. The analysis of these replies gives us only scant comfort. While admittedly the method of recording makes some difference, yet the difference is insufficient to explain the high maternal mortality in the United States as compared with foreign countries. The best rank that can be assigned to our country is the twelfth from the lowest. The official figure for the United States remains high regardless of what method of assignment is used, and it gives us little satisfaction to learn that we still have more than twice as many deaths as have Norway and Sweden. All this is true in spite of the fact that hospitals and facilities for the care of maternity patients have been greatly improved.

In the recent New York study, an attempt was made to place responsibility for maternal deaths. In examining each record there was a constant inquiry as to preventability. By careful analysis the conclusion was reached that some deaths were unavoidable. Of the 2,041 deaths studied during these three years, it was determined that 698 could not have been prevented, and these lives could by no known means have been saved. The other 1,343 fatal cases, about 65.8 per cent of all deaths, revealed on analysis certain factors that led to classifying them as preventable. It was considered that these women, if they had had proper treatment and care, could and should have been brought safely through parturition. This raises the question as to where the respon-

sibility lies, and here are the estimated figures of the preventable deaths:

Physician's responsibility.....	60 per cent
Patient's responsibility.....	30 per cent
Midwife's responsibility.....	10 per cent

To summarize, then, the estimates as to preventability and responsibility seem to show that, of all maternal deaths, approximately two-thirds could have been avoided, and of these deaths, in almost two-thirds of the cases, the fault was estimated to be the physician's.

The physician's responsibility for deaths involved a great many factors. In the case of the patient, it depended on whether she sought medical aid and care, and on how well she coöperated and followed instructions given her. It is to be borne in mind that these patients, often victims of poverty and ignorance, may be unwittingly factors in their own deaths. And it may be questioned whether they should be blamed, or whether this is a social problem, and society at large should be censured for failure to provide what is essential. Education is a necessity here, and these in the unfortunate strata of society can be reached only through further educational means. Boards of Health everywhere are including this program as part of preventive medicine.

The responsibility of the midwife lay mostly in the failure to recognize complications, and in not calling for medical aid and consultation. Her sin was mostly one of omission. Believing that most patients would deliver spontaneously, she waited in blissful ignorance, unaware of complications.

Let us now consider how the physician was considered answerable for 60 per cent of these deaths.

The medical man's obligation began with the patient's first visit. He was considered accountable if he did not demand frequent enough visits to guarantee proper and adequate observation of the patient. He was held responsible for making the proper examination to discover or exclude other disease. It was his obligation to make the proper pelvimetric studies and to make the correct prognosis as to the likelihood of normal delivery. And, furthermore, his responsibility was to recognize abnormality and complications.

It is only reasonable to demand this of the physician who expects to assume care of

a patient. But only an obstetrician can appraise the extent of this obligation. If the trained obstetrician at times may hesitate in his evaluations of the case and forming an opinion, is it any wonder that the less experienced physician at times may fail to meet this responsibility in its entirety?

In the conduct of labor the physician is held accountable for the choice of the hospital. He must know that the equipment and technic at the chosen hospital are adequate, and, if the selected institution is a general hospital, he must know that his obstetric patient will be properly isolated from other types of patients. If the patient is to be delivered at home, his responsibility includes the proper provisions for labor. Likewise, he is answerable for the assistance that may be necessary, and for the proper use and employment of anesthesia. In case of operative delivery, he is held responsible if a maternal death followed such delivery without proper or adequate indications.

As an obstetrician I am willing to admit that all this constitutes a great responsibility. The attendant must know when a period of "watchful waiting" is the safer procedure. He must know when limits of safety have been reached. He must follow just the right procedure at just the right time. The need for training is no greater in any field of medicine and surgery than in obstetrics, for in no field can the consequences of improper judgment be more grave. Let us not think that these preventable deaths were all due to carelessness. Often they followed where all factors had been carefully reviewed, and the faulty judgment followed earnest efforts to reach the right conclusions. But the problem often is difficult even for the best trained and most experienced. Lack of judgment, when not due to carelessness, is a sad commentary on the training physicians receive. While better training of physicians is a necessity, many receive only such training as the Medical School offers, which emphasizes how great is the responsibility of the Medical School.

In the consideration of the prevention of deaths, special analyses were made of certain conditions. Whenever a death was due to hemorrhage, it was considered avoidable if a blood transfusion had not been given. This applied to cases of ectopic gestation where the question of prevention depended on proper diagnosis, with

an adequate blood transfusion before operation. Likewise, in deaths following postpartum hemorrhage, the question of blood transfusion, as well as the management of the third stage of labor, and the choice of treatment pursued decided whether the death was avoidable. One sees at a glance that these deaths are considered non-preventable only when they occurred in spite of all treatment that modern medicine can offer.

Puerperal sepsis is still a big factor in maternal deaths. When this occurs in spite of all precaution and without examinations that might be causative factors, the death is considered unavoidable. On the other hand, if this patient had had vaginal examinations, or had had an operative delivery, the septic death was laid at the door of the physician. Thus the question of preventability could hinge on a seemingly small factor.

Toxemias of pregnancy offer a large field for exercise of judgment. While not 100 per cent preventable, by proper prenatal watching the developing toxemia can be greatly controlled, and by judicious and conservative termination of pregnancy, the worse degree of this condition can be almost entirely avoided. By properly controlling the patient's hygiene and habits, the danger from this complication can be greatly reduced. The responsibility for a mortality here depends on the adequacy of the prenatal watching, and the judicious judgment exercised in terminating the pregnancy, when other means fail.

After considering all these factors, and weighing all evidence, it is concluded that an important factor in the failure to reduce maternal mortalities was the gradual increase in the number of operative deliveries. It was postulated that the improvement that might have been expected from better maternity hospitals and facilities, had been offset by the harm resulting from the increased number of operative deliveries.

As we review the work we have seen during these years of obstetric practice, we are conscious of the truth of this conclusion. Obstetrics has changed, and is changing. Whereas formerly hospitals reported an eight per cent incidence of operative deliveries, the number of assisted deliveries has definitely increased, and at present many hospitals show an interference rate of 35 or

40 per cent, or even more. I feel, however, that the conclusions reached represent only part of the truth, and in my opinion the New York committee failed to emphasize the most important factor. A newer obstetrics has developed in the last two decades, and this has as its aim the lessening of pain in labor, and the shortening of the period of pain. It has been found that, in the hands of experts, results can be obtained satisfactory in both these factors. However, this type of obstetric practice is safe only in the hands of the best trained. When it is attempted by lesser trained physicians the results are likely to be disastrous. And I believe this fact explains the failure to reduce maternal mortalities. Obstetrics is fast becoming a major specialty, and to practice the intricacies of the newer obstetrics, it is not sufficient that the practitioner has a rotating internship and perhaps a three or six months' service in a Maternity Hospital. Too many men have as the foundation for their specialty no more training than this. Obstetrics is now a major specialty and to practice this requires a major training. I believe that this lack of training even more than the increased number of operative deliveries is responsible for our high maternal mortalities.

The practice of obstetrics has a heritage of conservatism, for obstetrics is traditionally conservative. It is a fact that in the past certain leaders have often been antagonistic to proposals that later proved to be worthwhile. These proposals were frowned on because they departed from the traditional, conservative obstetrics.

It is not strange therefore that obstetricians had misgivings when certain leaders began to talk about what we now know as the "newer obstetrics." This "newer obstetrics" breaks away from the traditional conservatism and proposes procedures which are intended to be a help to the patient in that they lessen the suffering or shorten the period of suffering. Instead of watchful expectancy, a more active course is proposed. We may say here that these procedures were proposed and developed by some of the country's outstanding obstetricians. We must admit that this was a sincere effort on the part of the profession to attempt to lessen the amount of pain suffered during labor. The argument was that if obstetrics remained conservative out of sheer tradition

there would be little opportunity for progress. The facts are that certain of the leaders in obstetrics have developed the ideas of the newer obstetrics, have practiced them, and have taught these ideas. And we now have available statistics of large numbers of patients who have been cared for by these proponents of the newer obstetrics. And we admit that in the hands of these leaders the results have been very satisfactory. To a certain extent they have accomplished what they set out to do. They have lessened and shortened the distress of labor, and it seems this has been accomplished without added danger to the mother and child. In fact, the statistics of these men are definitely better than those of the country at large.

It is because of the good results thus obtained by well trained obstetricians that I believe the conclusions of the New York Academy of Medicine do not go far enough. They emphasize the operative interference as being the source of the trouble, without apparently recognizing that better training is essential for the "newer obstetrics."

Obstetrics is a branch of medicine that has always been practiced by the general medical profession. No matter what special branch of medicine a physician was interested in or was trained for, he could always practice obstetrics without further study, for is it not true that the diploma he received on graduation, and the license he received from his state, specifically mentioned that he could practice obstetrics? But is it not equally true that he has the same legal qualifications for surgery? Would we expect him immediately to enter a surgical practice simply because his state license legally qualified him for this?

The general practitioner has always been, and doubtless always will be, the obstetrician for the masses. At least this will always be true under our present system of medical practice. And he will always be a safe obstetrician if he will practice a conservative obstetrics. If he develops a desire to practice the newer obstetrics, which includes pain relief, with an inevitable increase in operative deliveries, he will have the same results expected from an amateur delving into major surgery. And then there would arise the situation shown in the study of maternal mortalities in New York City.

We may ask "why" this newer obstetrics? Is there some justification for its de-

velopment, or is there no excuse for its existence? We cannot escape the conviction that the newer obstetrics when practiced at large is responsible for a great deal of harm. The results as shown in the New York report show this to be true.

In what department of medicine is it not true that there is a great difference in results depending upon whether a certain procedure is performed by an expert or by one less trained? And the more major the procedure, the greater difference there will be. And what field of medicine and surgery would have made progress if all operations were limited to those that a lesser trained individual could perform? And where would suffering humanity be if the dictum were made that no operations should be attempted except those which could be performed by an amateur? Where then would there be a place for ingenuity and skill in the practice of medicine?

If certain physicians develop a high degree of skill and can be of aid to suffering patients, without endangering the life and health of mother and child, must they refrain from exercising this skill and offering this aid simply because some lesser trained practitioner may attempt to imitate them? When this criticism is made, is it not viewing the problem from the wrong angle? Apply that same criticism to any field of medicine, and what is the answer? Should not the responsibility be with the lesser trained, should not he recognize his limitations, and practice within these limits? And if he wishes to practice on a different plane, should he not qualify himself by the necessary period of training? Development of a conscience, and recognition of one's limitations, are requisites for safe practice in any field of medicine.

We are bold enough to venture the opinion that the newer obstetrics has earned a place for itself. It may be good or bad obstetrics, depending on who practices it, and with what skill and judgment it is practiced. This statement could apply with equal truth to the conservative obstetrics. And in what field of surgery is this not equally true? Those who proposed and developed the ideas of the newer obstetrics were sincere in their hope of benefiting womankind. They had the knowledge and skill, and had courage to apply their ideas. And they had judgment and experience to keep them from

pitfalls. Chief of all, they knew when they could safely help their patients and also when certain procedures would be attended with risk. That differentiates the trained physician from the lesser trained. The fact must be repeatedly emphasized that while the newer obstetrics is safe in the hands of the well trained, it is disastrous in the hands of the untrained. Conservatives in obstetrics give this as an argument against the newer obstetrics, feeling that, since the leaders are imitated by men of lesser training, the results at large will be poor. We believe, however, that the standard of obstetrics should not be graded down but up above the level of the amateur. Is it not true that many branches of surgery would fall into disrepute if lesser trained men practiced in the field?

In recent years new methods have been developed to attempt to relieve the pain of labor. Ever since Simpson introduced the use of chloroform to relieve pain in the second stage of labor, obstetricians have been searching for methods of relieving the pain during the first stage. This gave to the profession first of all the "Twilight Sleep" of Krönig and Gauss, as developed in Freiburg. This was popularized in lay magazines, and as usual the good results were overemphasized, and the bad results not mentioned. The lay public were led to believe that here was something that could be used if only the medical profession was in sympathy with the relief of pain in labor. Although adopted and used in some sections, it was far from universally accepted. Certain dangers to the infant kept the medical profession from being too enthusiastic. Since then, innumerable methods have been tried, and a great deal of clinical experimentation has been done. Methods have been developed until at present a large variety of drugs are used in various clinics in the effort to make labor less painful. And it is probably safe to say that there is scarcely a clinic or hospital in the country where some method is not used. Patients who go through labor with lessened pain are naturally very enthusiastic. Obstetricians, however, find that these methods create certain new problems that did not exist before. Without going into too great detail we may say that chief among these new problems is the slowness of the second stage of labor, and the difficulty incident to final delivery

of the child. This then necessitates a large percentage of instrumental deliveries. To be sure, with the patient unconscious of pain, the attendant can wait until the interference required for final delivery is of a minor variety. In fact, some enthusiasts for this type of obstetric practice contend that the use of pain-relieving drugs, while increasing the percentage of instrumental deliveries, does away with "meddlesome obstetrics" in that the pleas of the patient in pain do not prompt the attendant to deliver her at a stage of labor contraindicated by universal obstetric judgment.

All the requirements of the newer obstetrics apply here with great force. If these pain-relieving drugs are administered by a trained attendant, he will be able safely to accept the higher percentage of operative deliveries. On the contrary, if the lesser trained practitioner attempts these methods of pain relief, he is often confronted by new and unlooked for situations with which he may cope only with great difficulty.

It is believed that the fundamental training in obstetrics should always be conservative. Medical schools should teach a conservative obstetrics. It is rather surprising at times to see how great is the difference between an obstetrician's teaching and his practice. This apparent inconsistency can be readily understood.

A solution of all these problems and apparent inconsistencies is not yet at hand. The only hope lies in the better training of the medical men. It is imperative that the training of practitioners and obstetricians become progressively better. With better trained physicians it promises better for a reduction of maternal mortalities. The one fact that stands out in all this controversy is the challenge that it presents to our teachers of obstetrics. There is much more to be taught now than in the past. The problems are increasingly more difficult. There is much more to be warned against. Never was the development of an obstetric conscience so essential as it is today. This requires extensive training and experience. And the student has the right to demand this training and experience from his medical school. In order that students may receive this training, the Medical School can and must furnish an adequate clinical material.

As we talk with older medical alumni of

our University, we hear tales, often told in jest, of how their obstetric experience while in Medical School had consisted of seeing one patient delivered by the professor. These men answered their first obstetric call with a throbbing heart. The success of these men was due to the fact that, while clinical material was meager, the fundamental principles were well taught.

Doubtless there is no type of clinical patient that a medical school in a small center finds so difficult to obtain as the obstetric patient. The emergency connected with delivery makes it difficult for a patient to travel a long distance. To insure arrival at the hospital in proper time would require an early admission. This is an economic problem in most cases. We are firmly convinced that the financial problem is the crux of the entire situation. Until this is recognized, clinical material will be inadequate. The University furnishes good teachers. It can and must also furnish patients. It is gratifying to know that a great deal of effort is being made to solve this problem at Michigan. This solution is essential for our school to retain rating as a "Class A" institution. Certainly no one wants to see our Medical School lag in this respect. The acceptance of the medical student by the University implies the contract to furnish the necessary clinical material. The fact that obstetric patients are not so readily acquired does not release the Medical School from its obligation. It is gratifying to know that a joint committee from the Medical School and the Michigan State Medical Society is trying to find a solution for this difficult problem. And it is hoped that the physicians of the state will respond in a kindly and sympathetic manner, and we believe the University then can and must find a way to finance and subsidize these patients so that none who wish to enter will be turned away. This is a hope not built up by the desire merely to see a large department or clinic. This hope is fostered by the conviction that the fundamental factor in reducing maternal mortalities is the better teaching of obstetrics. This must begin with the undergraduate student. There must be plenty of normal material for him to observe, as well as pathologic material. And a Faculty that in the past has been able to teach good obstetrics with meager clinical material could then teach a grade of obstetrics that would

be a great factor in reducing maternal mortality.

Many medical schools boast of large obstetric material, but on investigation this is often found to be mostly out-patient material with a home delivery service. The chief argument is that, since so many patients are delivered in homes, the student must have this experience. It is curious to note that educators feel that this is proper for obstetrics, when no other department finds it is adequate. A great many medical diseases are treated in homes, but what internist would think of teaching internal medicine by having his students care for these patients in their homes? It might be granted as being proper if an instructor could accompany each medical student in his daily rounds. But what medical school could furnish sufficient competent instructors! The fundamental principles of obstetrics should

be taught under favorable conditions, with the closest supervision by the instructors. The University of Michigan Medical School, since the beginning of the Peterson Era, has believed in this principle, and this doubtless accounts for the good teaching with a limited clinic.

The University has still another great opportunity to help solve the problem of maternal mortalities. An increasing number of practitioners are each year looking for opportunity for further training. There is very little opportunity to acquire this extra training. There is great need for a graduate school of obstetrics, although obviously this would demand a still larger clinic. We trust the University will not be content until it serves both its students and the practitioners of the State, and thus become an important factor in the lowering of maternal mortalities.

OPTIC NEURITIS AND RETROBULBAR NEURITIS: ETIOLOGY AND TREATMENT*

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The uninterrupted passage of the impulses of light stimuli from the retina to the corresponding occipital cortical areas of the brain depends, in part, on the integrity of function of the optic nerves and optic tracts. In optic neuritis and in retrobulbar neuritis, disruption of function of these structures occurs initially, at least, in isolated bundles of fibers with resultant anopsia or scotoma projected in the visual field. The history of onset of loss of vision and the state of previous or coincident general health, together with the degree of central visual acuity and the information obtained from the objective ocular examinations of the external and internal functions and structures of the globe, all

provide the data for diagnosis. Complementary examinations, particularly those of the central nervous system, are required to distinguish optic neuritis and retrobulbar neuritis from other clinical entities, to determine the etiology and to make possible institution of the appropriate therapeutic procedures.

Ophthalmoscopically, differential diagnosis between optic neuritis and retrobulbar neuritis is not difficult. Ischemic elevation or

true papillitis of the nerve head will be seen in the active phases of optic neuritis. This will vary from minimal fullness of the disk with blurred upper and lower margins, to edema of 3 to 4 diopters. Peripapillary edema of the surrounding retina may be observed and there will be definite venous engorgement with slight smooth generalized retinal arteriolar narrowing. In retrobulbar neuritis the findings in the stages of activity will range from those of an apparently normal disk in the first few days to

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Now-use in the faculty & even as in persons who have seen in both papers

ultimate temporal pallor. Slight hyperemic fullness of the papilla occasionally is observed. The veins will appear normal or there will be only slight venous fullness and the arteriolar narrowing will be absent or only minimal. Retinal ischemia is seen only in those rare instances when compression of the central vessels of the optic nerve has resulted from massive focal inflammation.

As the morbid processes of optic neuritis subside there will ensue secondary gliosis of the disk with slight marginal pigmentary disturbance, coincidental loss of nerve substance with slowly progressive atrophy of the optic nerve and relative fullness of the veins with secondary slight smooth generalized retinal arteriolar narrowing. In retrobulbar neuritis there will appear progressive temporal pallor of the disk, with or without some visible loss of nerve substance, and the veins may present a relative fullness. Within a few weeks following the acute episode, slight secondary smooth generalized retinal arteriolar narrowing will manifest itself. In both optic neuritis and retrobulbar neuritis the normal foveal and macular reflexes appear to be lost more often than not at a later date after activity has subsided and healing has progressed. Slight migration of pigment to the macula may be seen.

The visual field defects vary individually and correspond to the situation of the lesion or lesions and to the degree of loss of central visual acuity. A round, central scotoma is the characteristic defect and will vary from only a few to approximately 25 isopters in diameter. Defects peripheral to the fixation point, when combined with a central defect, can be mapped out as a cecentral scotoma and indicate a coalescence of two or more lesions in the optic nerve. Many variations in these defects occur as changes in the course of the disease take place. The larger scotomata will break up, as improvement occurs, into a smaller central one and one or more paracentral scotomata with an enlarged blind spot. Recovery may appear to be complete but very careful examination will elicit a residual relative central scotoma. In cases of optic neuritis the area of greatest density usually will shift nasally to the point of fixation and may be accompanied by a relative contraction of the nasal field. In cases of retrobulbar neuritis, with the lesion situated

at the chiasm or just posterior to it, scotomata will tend ultimately to be homonymous or to become densest temporally to the point of fixation.

In any discussion of these two forms of neuritis it must be borne in mind that the lesion, per se, is an axial neuritis usually situated anteriorly in optic neuritis and nearer the chiasm, or posterior to it, in retrobulbar neuritis. This is in contradistinction to the descending neuritis following the direct transmission of inflammation from the brain, particularly of its base, to the optic nerve. In the latter, such as in frank meningeal infections, the inflammation descends along the sheath of the nerve and may also involve the peripheral portions. The degeneration and sclerosis noted in focal areas in the nerve fibers is characteristic of multiple sclerosis (Friedenwald). Degeneration of the axis-cylinders without sclerotic thickening but with atrophy and infiltration of round cells is the picture of a toxic, degenerative process. The very early lesions consist chiefly of infiltration of fluid in the focal areas about end-arteries and exhibit no sclerosis or atrophy. As the focal areas extend and progress, with chronicity, such as in the less acute and more chronic forms of optic neuritis, the cellular degeneration can be demonstrated as progressing both proximally and distally.

Analysis of Cases

In 500 definitely proved cases of multiple sclerosis observed at The Mayo Clinic, Benedict reported that disturbance of vision was given as the first symptom in 15 per cent. In an additional 40 per cent, this symptom was given as a second or third symptom. Among the cases which constitute the basis of this report are included forty-three cases of multiple sclerosis. In 19 per cent of these, the patients gave disturbance of vision as the first symptom and, since all the patients had visual disturbance, the remaining 81 per cent gave it as the second or third symptom. In more than 60 per cent of the group of 500 cases of multiple sclerosis in which visual disturbance was given as an earlier or later symptom, intranasal operations on sinuses had been performed elsewhere for relief of the visual loss; in only 16 per cent of the forty-three cases of multiple sclerosis with optic neuritis or retrobulbar neuritis included in

OPTIC AND RETROBULBAR NEURITIS—BENEDICT AND KOCH

TABLE I. OPTIC NEURITIS AND RETROBULBAR NEURITIS, IMMEDIATE ETIOLOGIC FACTORS

Previously Reported Series (Benedict) (225 Cases)		Present Series (89 Cases)	
Cases	Etiologic Factors	Cases	Etiologic Factors
155	Multiple sclerosis	43	Multiple sclerosis
28	Alcohol and tobacco	8	Alcohol and tobacco
14	Diabetes	7	Syphilis
14	Pernicious anemia and nicotine	6	Arterial spasm
4	Congenital amblyopia	4	Foci of infection
3	Indeterminate causes	3	Plumbism
2	Plumbism	3	Indeterminate causes
2	Syphilis	2	Alcohol (potable spirits)
1	Postpartum hemorrhage	2	Ascending myelitis and neuromyelitis optica
1	Familial causes	2	Undetermined intracranial lesion
1	Sinus disease	2	Pituitary tumor
		1	Pernicious anemia
		1	Chronic chiasmal arachnoiditis
		1	Nicotine (smoking tobacco)
		1	Diabetes
		1	Methyl alcohol (industrial exposure)
		1	Secondary glaucoma
		1	Sinus disease

the present series had such operations been performed.

In this study of a total of eighty-nine cases, disregarding the etiologic groupings, in twenty-nine the diagnosis was optic neuritis and in sixty, retrobulbar neuritis.

The data given in Table I are offered for their comparative values.

Of the eighty-nine cases in this series which were encountered at the clinic in the period of two years from 1934 to 1936, in fifteen the patients desired only a diagnostic opinion or no treatment was advised because of the stage of inactivity of the process. Seventy-four patients were advised to undergo treatment at the clinic or elsewhere. In those instances in which treatment was not advised or in which diagnosis only was requested, further information as to progress was not received. Four other patients either did not reply to correspondence or failed to return for reexamination. Forty-nine patients achieved satis-

factory improvement in vision and ten experienced more or less temporary improvement prior to the time when their visual acuity receded to the level found on first examination at the clinic. Eight patients eventually lost more in vision despite treatment and, in three cases, the process remained arrested at the level found on first examination.

In a trifle less than half (forty-three) of the cases, retrobulbar neuritis and optic neuritis were associated with early or frank multiple sclerosis; of these, in thirty-two cases the condition was retrobulbar neuritis and in eleven it was optic neuritis. The diagnosis of multiple sclerosis was based on the neurologic findings of diminished, easily exhaustible or absent abdominal reflexes; inequality or hyperactivity of the deep reflexes; the presence of equivocal or positive Hoffmann and Babinski reflex phenomena and the presence of weakness of individual external ocular muscles. Results of exam-

ination of the fluids obtained from spinal puncture in forty-eight cases were definitely conclusive and confirmatory in only a very few instances. The history of onset almost invariably contained positive information concerning prodromal subjective symptoms observed in the most distal portions of the extremities. These were numbness, tingling, pseudoformication and paresthesia. Weakness of voluntary muscles of the lower extremities and manual awkwardness in performing fixed habit movements often were noted as having been observed prior to the onset of the visual blurring. Invariably, there was a history of preceding prolonged periods of overwork, financial worry, domestic problems, increased responsibilities, deviation from the usual routine, prior vague lack of the usual feeling of well-being, a preceding common cold or abdominal distress with slight rise in temperature. Any combination of these situations was noted.

In those cases wherein immediate apparent factors also were elicited, such as association with various toxic agents and metabolic diseases, one or several of the above-mentioned findings became evident from the history. In two cases in which later operative procedures proved the presence of a pituitary tumor, the diagnosis of retrobulbar neuritis was originally made. The same held true in two other cases but diagnosis subsequently was changed to that of undetermined intracranial lesion, probably chiasmal, and reexaminations were advised.

These four cases just mentioned were included in this series because the histories and the initial findings were those of retrobulbar neuritis, probably on the basis of chronic local chiasmal arachnoiditis. In a certain small percentage of cases, as was pointed out by Craig and Lillie, symptoms of chiasmal lesion are present but from them it is impossible to predicate the underlying lesion. This also has been pointed out recently by Hagedoorn.

The excessive use of potable spirits and smoking tobacco were apparent as causative factors in eight cases of this series, one of which was a case of optic neuritis and seven of which were cases of retrobulbar neuritis. Typical histories and findings were obtained. The onset of the blurring of vision, as is well known, is usually immediately bi-

lateral and very insidious in contradistinction to the sudden or comparatively sudden unilateral visual loss when it cannot be proved that a toxic agent has a part in the condition. Two cases were encountered, one of optic neuritis and one of retrobulbar neuritis, in which alcohol alone was accountable. In another case the diagnosis was retrobulbar neuritis of one eye owing to the use of tobacco alone and this evidently accounted for the visual loss. Optic neuritis of the other eye had been diagnosed elsewhere eight years prior to the onset of the second disturbance. The visual loss in the first eye was permanent.

Syphilis as an immediate factor in the production of the axial lesion or lesions to which the names of "retrobulbar neuritis" and "optic neuritis" are given is well known. Numerically, it proved to be the third most important factor in this series; there were seven cases, one of which was a case of retrobulbar neuritis and six of which were cases of optic neuritis. Arrest of the process or improvement in vision followed antisyphilitic therapy.

In the six cases in which arterial or arteriolar spasm appeared to be the immediate cause, either the condition did not improve or further progress was unknown. Four of these were cases of retrobulbar neuritis and two were cases of optic neuritis. Therapeutic agents included gold sodium thio-sulphate, potassium iodide, protiodide of mercury and ammonium chloride. Other more general methods were contraindicated in each case.

On the basis of Rosenow's demonstration of selectivity of virus, those instances of retrobulbar neuritis and optic neuritis which occurred in the presence of focal sepsis can be said to be owing to specific toxins. In four cases in this series, two of which were instances of retrobulbar neuritis and two of optic neuritis, there was no other apparent immediate etiology; possible foci in one or more of the following forms were demonstrated clinically: tonsillitis, gingivitis, periapical dental infection, pyorrhea, prostatitis, seborrheic dermatitis and nonspecific endocervicitis. Improvement of vision followed treatment (but not eradication) of these foci; however, it cannot be said that the improvement in vision will be permanent. In one of these cases mildly excessive consumption of alcohol and tobacco was

noted, together with roentgenographic findings of thickened ethmoidal mucous membranes.

Cohen has reported optic atrophy as the presenting sign in pernicious anemia. In this series there was one case of pernicious anemia with optic neuritis and one of diabetes with retrobulbar neuritis. Both of these patients were dismissed to follow appropriate dietary regimens after initial improvement had taken place while they had been hospitalized. The progress of the former patient remains unknown to us; the latter, in despondency, killed herself shortly after reaching her home.

Exposure to methyl alcohol was the most likely cause in a case of retrobulbar neuritis of four years' standing. The patient had employed this toxin in his work as a cobbler for more than twenty years. Treatment was not advised except a change of occupation. He claimed subjective improvement within two months after establishing a small grocery business.

Three cases of plumbism were encountered in which retrobulbar neuritis occurred. Improvement followed change of occupation and release from exposure, together with general supportive measures and the use of calcium lactate and foods containing calcium.

In two cases of optic neuritis and in one of retrobulbar neuritis no immediate cause could be determined and the etiologic agent remained undetermined.

Optic neuritis was observed in an eye that was aphacic and in which the tension averaged 43 mm. of mercury (Schiötz). A cataract had been extracted three and a half years prior to reexamination. Vision of 6/6 had been obtained with correction. The patient read no English and was never very coöperative; therefore the degree of visual loss when she was seen again could not be accurately determined. She was sent home to follow local treatment for glaucoma. Parker noted the onset of elevation in the disk of an eye on which an Elliot trephining operation had been performed but it is unknown in the present case if extraction of the cataract was performed in the presence of increased intra-ocular tension.

Sinus disease probably accounted for one case of optic neuritis in the present series. The report on roentgenograms was, "thickened antral membranes; sinusitis with in-

volvement of the sphenoids." Clinically, sinusitis was not demonstrated but chronic postscarlatinal otitis media of long standing was present. Marked improvement in vision followed intravenous injection of 50,000,000 killed typhoid bacilli and four intramuscular injections of 10 c.c. each of sterile milk.

The records of three patients are given in detail. In examination of one of these patients, optic neuritis was found and, in examination of two, retrobulbar neuritis. The former case, and one of the two latter cases, culminated in acute, ascending myelitis. In the original clinical examinations definite signs were not elicited but a tentative diagnosis of multiple sclerosis, or of encephalitis, was made. The other patient, in addition to retrobulbar neuritis, was proved by operation to have local chiasmal arachnoiditis. In each of these three cases the most probable ultimate diagnosis appeared to be disseminated encephalomyelitis.

Reports of Cases

Case 1.—A woman, aged thirty-six years, was first seen at the clinic on February 21, 1936, with the complaint of decreasing vision in the left eye for the preceding five days. In so far as she was able to recall, the vision always had been excellent and equal in the two eyes. On awakening on the day of onset she noticed a hazy streakiness extending vertically across the central portion of the field of vision of the left eye. Within forty-eight hours blurring of the entire visual field of that eye had taken place but was more marked inferiorly. At this time a physician near the patient's home was consulted who felt that the visual failure might be owing to disease of the sinuses but he did not advise treatment. On the following morning the vision had failed to doubtful perception of light. Further visual loss did not occur.

The patient had fallen down a flight of eight concrete steps two weeks prior to the failure of vision and she attributed the visual failure to the accident. There was no evident injury to the head although the entire scalp became tender to touch. About twenty-four hours following the fall, cramping pains began in the right upper abdominal quadrant and extended down the right thigh and leg. That same day, before subsiding, the pains seemed to localize in both lower abdominal quadrants. Further subjective symptoms were not noticed for two days. Cramping pains then occurred in the right lower abdominal quadrant. These were described as resembling early labor pains and were associated with a varying (1 to 2 degrees) rise in temperature. At this time the patient went to bed and remained there for five days. There was no nausea, vomiting, diarrhea or urinary disturbance; her general health had always been excellent.

General physical examination did not reveal demonstrable cause for the poor vision and gave essentially negative results except for enlarged tonsils and mild, nonspecific endocervicitis. The neurologic examination gave objectively negative results. Roentgenograms of the head did not reveal evidence of

fracture but the sella turcica was deepened and widened and suggested the presence of a suprasellar tumor. Vision was 6/5 with the right eye and light was poorly perceived with the left eye. The external ocular movements were normal, the corneas were clear and the conjunctivæ and scleræ were normal. The left pupil was slightly sluggish to a direct light stimulus. Both pupils dilated widely and freely under mydriasis. Ophthalmoscopic examination revealed the right disk to be of good color with well defined margins and a visible lamina cribrosa and normal physiologic cup. The macula and retina were normal and there was a good foveal reflex. The left fundus presented the same findings as the right except that the left disk was mildly ischemic, its margins were blurred and there was an elevation of $1\frac{1}{2}$ diopter. The veins on the left were slightly engorged and the arterioles were slightly paler than normal. The right visual field was negative and the left could not be obtained.

Left optic neuritis was diagnosed and the patient was admitted to the hospital for foreign protein therapy on the day after examination at the clinic. On the day of admission she was given intravenously 25,000,000 killed typhoid bacilli of the stock vaccine. The reaction was satisfactory and the temperature rose to 103 degrees F. On the fourth day the dose was repeated with a rise to 105 degrees F. On the seventh and ninth days, 3.5 c.c. of a neurotropic anticephalitis serum were given intramuscularly. Definite reaction was not noted but it was later conjectured that this therapeutic procedure might have intensified an already active inflammatory process. Fifteen million typhoid bacilli were injected intravenously on the twelfth day following admission, with a rise to 103 degrees F., and this dose was repeated on the fourteenth day with a rise of 101.5 degrees F.

On March 7, the fifteenth day after admission, the patient was still unable to count fingers with the left eye; however, she felt well except for an itching sensation over the abdomen and chest. On the sixteenth day she was able to count fingers with the left eye but complained of inability to urinate and of abdominal distention, together with numbness ascending from the legs to the abdomen and migratory muscular and cutaneous pains with arthralgia. On examination, all reflexes were equal and very active. There was a bilateral Hoffmann reflex, no Babinski reflex and no ankle or knee clonus. At catheterization, 700 c.c. of urine were obtained. When catheterization was repeated three hours later, 750 c.c. were withdrawn. On the seventeenth day the woman was found to have neuromyelitis optica, with very acute ascending myelitis; the sensory level was at about the second rib anteriorly. Spinal puncture was done but the fluid revealed no abnormality except a cellular increase, with the polymorphonuclear leukocytes exceeding the moderate pleocytosis. It was felt, however, that the process was an aseptic one although necrosis of the spinal cord was a probable eventuality.

Supportive intravenous therapy was begun, but the temperature continued elevated and the pulse rate increased. On the eighteenth day swallowing became somewhat difficult, numbness of the arms had increased and respirations had become labored owing to paralysis of the intercostal muscles. Another spinal puncture gave essentially negative results except for a similar increase in polymorphonuclear leukocytes and in lymphocytes. The patient's condition remained about the same until the twenty-third day, when pain about the neck and shoulders increased. Spinal puncture produced about 300 c.c. of a thick, yellowish-green fluid which had to be withdrawn under suction. Microorganisms were not obtained on culture. The following day some im-

provement appeared to have taken place. The temperature and pulse had diminished somewhat and strength had partially returned to the right hand. Ophthalmoscopic examination now revealed hyperemia of the right disk with blurring of the upper margin. There was little, if any, residual edema of the left disk but mild, definite pallor was evident. Mild venous engorgement of both retinæ was noted. Another spinal puncture produced a clear, xanthochromic fluid without other apparent abnormality. On the twenty-sixth day the patient complained of blurring of vision of the right eye although she could still read newspaper. The upper margin of the right disk was elevated 1 diopter and there was blurring of the lower margins. The veins of both retinæ were markedly engorged. Improvement continued generally but more paresthesia was noted.

On the thirtieth day following admission only very large print could be read with the right eye and severe posterior orbital pain ensued on ocular rotation. There were 3 diopters of elevation of the right disk and marked venous engorgement in that eye. Vision of the left eye was still graded as no better than the ability to count fingers at 2 to 3 meters. There was moderate but definite pallor of the left disk, with blurring of the upper and lower margins. The venous engorgement was only slight. Examination of spinal fluid again revealed no abnormality except for slight pleocytosis and the fluid was still clear grossly and was xanthochromic. On the thirty-third day, sensations had improved in the arms but strength still remained about the same. A Babinski reflex was elicited for the first time on the left and questionably on the right. Subjectively, the patient believed her vision to be improved on the right. She could not count fingers on this day with the right eye. The edema of the right disk had diminished $\frac{1}{2}$ diopter. On the thirty-fifth day vision in each eye was still graded as only the ability to count fingers at a distance of 2 to 3 meters. The edema of the right disk was reduced to 2 diopters. Babinski reflexes could be demonstrated on both sides and the sensory level had receded somewhat. Quinine sulphate, grains 3 (0.2 gm.), was administered three times a day after meals.

On the forty-second day following admission the woman was discharged from the hospital to return to her home for further treatment. Vision in the right eye was limited to the ability to count fingers at 2 meters; in the left eye, at 4 meters. She was just able to read $\frac{1}{4}$ inch print with the left eye. Ophthalmoscopically, there still remained 1 diopter of elevation of the right disk, with marked venous engorgement. On the left, there was mild but definite pallor of the disk with blurred upper and lower margins, slight venous engorgement and retinal arteriolar narrowing. The patient's general condition was believed to have improved sufficiently to allow the continued use of quinine sulphate and potassium iodide to the point of toleration. She was to employ hot baths and pilocarpine sweats at home.

On June 12, 1936, nine weeks after the patient's dismissal from the hospital, a letter was received stating that the patient had moved to another community before resuming treatment under the care of her local physician. He believed, however, that she had made some slight improvement in her general condition in so far as he could determine from hearsay.

Case 2.—A woman, aged twenty years, was first seen at the clinic on June 8, 1936, for general examination. During the preceding six months, she not only had required more sleep at night than she had been accustomed to having but she also had needed additional naps in the daytime. She be-

came ill rather suddenly four months previous to her coming to the clinic and experienced slight numbness of both arms, more noticeable on the left, some nausea, anorexia and vomiting. Castor oil was administered and she was put to bed. The nausea and vomiting subsided after a few days but the anorexia persisted. One week after the onset the left eye constantly deviated inward and diplopia appeared and persisted for about eight weeks. She remained in bed taking a high protein diet for ten weeks on the advice of a physician near her home. Treatment at home was chiefly symptomatic on the presumption that the illness was encephalitis; however, deep roentgen therapy to the base of the brain was given later. Six weeks prior to her coming to the clinic, vision in the right eye began to blur and in three days was reduced to little better than the power to recognize gross movements in the upper field. Vision remained thus.

General physical examination gave negative results. The first neurologic examination gave objectively negative results but reexamination five days later revealed numbness of the left side of the face and jaw, together with mild reduction in the sense of pain over the left cheek, left side of the nose and left side of the upper and lower lips.

Roentgenograms of the head gave negative results except that the shadows of the optic foramina revealed the right optic canal to be slightly larger than the left. The urine was tested for lead and arsenic but was found to be negative for these substances. The agglutination test for *Brucella abortus* gave negative results and the sedimentation rate was within normal limits. A culture of the throat was made but skin tests, performed with an immune antibody globulin, produced no evidence of any reaction to streptococci. Examination of the spinal fluid revealed negative Kolmer and Kline reactions, a value for total protein of 40 mg. per 100 c.c. and a colloidal gold reading of 1322210000. The response to jugular pressure was prompt.

Vision in the right eye was 1/30, eccentrically and above, and the patient could not read print. Vision in the left eye was 6/5 plus 1 with correction. External examination of the eyes gave negative results except for a slightly slower pupillary reaction to direct light on the right as compared with the normally reacting left pupil. There was slight weakness of the left external rectus muscle. The exophthalmometer at 92 mm. gave a reading of 16 for the right eye and of 18 for the left, from which it was felt that the slightly enlarged right optic canal, as noted on roentgenographic examination, was not significant. Ophthalmoscopically, there was found to be slight, generalized fullness of the retinal veins with structurally full disks; the margins of the right disk were slightly blurred and presented a suggestion of pallor. The left disk was clearly defined and of good color. Examination of the visual fields revealed a large absolute central scotoma in the right eye with a normal field for form. The left visual field was normal.

The history and findings suggested an acute inflammatory process about the base of the brain and a diagnosis of probable encephalitis with retrobulbar neuritis was made. Multiple sclerosis was considered, although the abdominal reflexes were present and active. The patient was dismissed on June 16, 1936, to be given typhoid vaccine intravenously by her home physician.

On July 16, it was learned by letter that considerable improvement in the patient's general condition and in her spirits had taken place after the third injection of vaccine. She was able to read small newspaper with her right eye. Numbness of the right arm had disappeared and fatigue was not as marked as before. On July 22, in another letter it was

stated that vision in the right eye had improved to 3/10. On September 8, in a letter it was stated that diplopia had returned rapidly in the past ten days, that there was marked loss of sensation in the left leg and on the right side of the face and in the right arm and that the patient could not walk without support. Quinine sulphate had been given to the point of tolerance. The home physician held the opinion that very acute multiple sclerosis was the most likely diagnosis. Her condition rapidly became worse; vision in both eyes failed completely; vocal paralysis, complete sphincteric relaxation and complete loss of voluntary movement of the arms and legs had taken place. The woman vomited incessantly and, on the day preceding her death on September 19, 1936, her pulse rate and temperature, both of which had been normal, rapidly rose. Gross postmortem examination of the brain was permitted, but nothing abnormal was noted; however, the home physician remained of the opinion that acute multiple sclerosis was the correct diagnosis.

Comment on Cases 1 and 2.—These two cases have been reported in detail in order to illustrate certain difficulties in diagnosis presented by a small percentage of patients who have visual disturbances preceding the later manifestations of disseminated, demyelinating disease of the central nervous system. The history and clinical findings in each case, on the first meeting with the patient, did not differ appreciably, except in the cellular increase found in the spinal fluid, from data obtained from other patients who presented themselves with histories of rather sudden unilateral loss of vision. It appears reasonable to assume that in Case 1 the two injections of the neurotropic anti-encephalitic serum activated an already acute process to greater intensity. Thus, the more probable diagnosis would appear to be disseminated encephalomyelitis of the vaccinal type since acuteness and intensity became apparent within one week to ten days after the first injection of the serum.

Diagnosis in Case 2 never was made satisfactorily although the case was felt to be one of acute multiple sclerosis. The history and clinical findings were very similar to those obtained in Case 1 and foreign protein therapy was given in both cases; however, the second patient received no other vaccines or serums. The home physician, even after the death of the patient, believed the process to have been acute multiple sclerosis but it would appear more probable that it was disseminated encephalomyelitis. Grinker stated that it is as difficult to distinguish between the acute forms of these two conditions as it is to distinguish clinically between their chronic forms.

Case 3.—A girl, aged seventeen years, was first seen at the clinic on July 9, 1935, with the complaint of markedly reduced vision in the right eye, of three months' duration.

She always had enjoyed good general health until the winter of 1934-1935. Within a period of three days in December, 1934, vision in the left eye was rapidly reduced to the ability to count fingers. An eye specialist near the patient's home who was consulted, believed the trouble to be owing to retinal hemorrhages and advised immediate tonsillectomy. This was accomplished within a week following the onset of visual loss and vision returned to normal at the end of the two weeks following operation. Three months prior to the patient's arrival at the clinic she experienced lassitude, malaise, slight fever and rhinorrhea, all of a week's duration, at the end of which time a diagnosis of influenza was made and the patient was ordered to bed. Within a few days she observed that vision in the right eye was failing and, at the end of three days, this was reduced to the ability to count fingers. Vision had remained thus. At no time was there photophobia, localized headache, ocular pain or paresthesia or numbness of any part. Examination by the home physician failed to reveal the presence of focal infection. The right maxillary sinus had been punctured twice and irrigated, but visual change had not been observed.

General physical examination gave negative results. Roentgenograms of the head, optic foramina and sinuses gave negative results. Focal infection or localized sepsis was not found. On one occasion, seven weeks after the patient's registration at the clinic, and following the third injection of typhoid vaccine, 0.06 mg. of lead was found in 1420 c.c. of urine. Neurologic examination gave objectively negative results but slight pleocytosis of the spinal fluid indicated the presence of inflammation of low grade. Ophthalmologic examination revealed vision of the right eye to be reduced to light projection and the power to distinguish moving objects. Small print was read with the left eye only and vision was 6/5 plus. The pupils were equal in size, but the right reacted somewhat sluggishly to direct light stimuli. Ophthalmoscopically the media of both eyes were clear and the disks were slightly smaller than the average. The right disk presented mild, generalized pallor, which was more marked on the temporal side, and slight loss of nerve substance. The left disk was structurally full and slightly hyperemic. The lamina cribrosa was not seen, the scleral ring was mildly exaggerated and there was slight deposition of pigment at the temporal margin. The visual field of the right eye could not be mapped, but the field of the left eye was normal.

A diagnosis of retrobulbar neuritis was made and the patient was admitted to the hospital on July 24, 1935, for foreign protein therapy, with permission to leave at the end of each drop in temperature. On the first day, a satisfactory reaction and a rise in temperature of 102.5 degrees F., followed intravenous injection of 15,000,000 killed typhoid bacilli obtained from a stock vaccine. Twenty-five million were given on the fourth day, with a rise to 101 degrees F. Forty million were injected on the sixth day, with a rise to 100 degrees F. On the ninth day, 50,000,000 were injected and the temperature rose to 102.4 degrees F. On the tenth day following admission, vision in the right eye had not improved and vision in the left eye had been reduced to approximately 6/20, but the patient still could read fine print. Vision on the twelfth day was reduced to perception of light only in the right eye and to the ability to count fingers in the left. There was marked pallor of the right disk, with temporal loss of nerve substance. There was mild pallor of the

left disk with some residual blurring of the margins. There was dense, central scotoma in the left visual field, together with nasal hemianopsia for the 30 mm. white object at 330 mm. The field of the right eye could not be obtained. Two days later, on the fourteenth day following the patient's admission to the hospital, she could count fingers with the left eye, and with the right eye still could perceive light only. On this day was begun daily administration of 2 ounces (60 c.c.) of calcium lactate.

On the following day a pilocarpine pack, grain 1/10 (0.006 gm.), was given and 15,000,000 typhoid bacilli were injected on the nineteenth day. Another pilocarpine pack of the same dose was administered on the twenty-second day, following which the patient felt that her vision had become worse. Within twelve hours, however, her vision had returned so that she could discern a mirror across the room with the left eye. Following a hot bath, vision again was lost. Administration of potassium iodide, grains 18 (1.2 gm.) daily, was begun. On the twenty-sixth day the girl could count fingers vaguely with the nasal field of the left eye. The right pupil did not react to direct light and the left pupil only very sluggishly. Light projection no longer could be elicited in the right eye and perception of light was doubtful. Good light projection in the nasal field of the left eye still remained. On the twenty-eighth day, only questionable perception of light was demonstrable in the left eye and it was felt that chiasmal exploration was justified. Accordingly, right transfrontal craniotomy was performed on the twenty-ninth day after the patient's admission to the hospital. The right optic nerve was found to be much smaller than the left and had the appearance of being the seat of optic neuritis. There were definite adhesions between the overlying brain and the optic chiasm and others existed within the sella turcica, about the optic nerves. It was the impression of the surgeon that there existed optic or retrobulbar neuritis, with associated chiasmal arachnoiditis, and that the operation was justified because of the opportunity to separate the adhesions from about the left optic nerve. It was felt that this procedure might preserve the remaining vision or assist in improvement to some extent.

On the thirty-first day after the patient's admission, and the tenth day after operation, vision appeared definitely to be improving. The left pupil reacted promptly to light and the girl could see objects in the left nasal field and could count fingers correctly. She was dismissed from the hospital on September 6, 1935, forty-four days following admission, and sixteen following operation, after an uneventful convalescence. On September 10, neurologic examination again gave objectively negative results except for the ocular condition. The right eye was blind and vision in the left eye was 1/60. The right disk presented marked pallor, with temporal loss of nerve substance, and the left disk was mildly pale, with some residual blurring of the margins. There was an absolute central scotoma in the left field, with the 35 mm. white object at 330 mm. together with temporal contraction and inferior altitudinal anopsia. The patient returned to her home September 11, 1935, to continue treatment with calcium lactate.

In the letter received September 21, it was stated that the patient complained of continued numbness of both right extremities and that there was no change in the vision. On October 15, it was stated in a letter that all voluntary movements of the entire right side had been lost and that a local physician had substituted hydrochloric acid by mouth for the calcium lactate but that the hydrochloric acid was not well tolerated. On January 2, 1936, it

was learned by letter that the father had died but that the patient had remained in remarkably good spirits. Light was not perceived by either eye, vomiting occurred constantly, complete anal and urinary sphincteric relaxation had taken place and clonic contractions of both legs often were so severe as to keep the patient awake. Transient, painful paresthesia was present about the neck and shoulders and in the right leg. All power of voluntary movement had been lost and the girl was entirely helpless.

Comment on Case 3.—The absence of signs and symptoms indicative of demyelinating disease, demonstration of lead in the urine, and progressive loss of vision together with a hemianoptic field defect determined the diagnosis of chronic arachnoiditis of the optic chiasm. Subsequent appearance of ascending paralysis of Landry's type could not be predicated on the basis of observation during the first days of the patient's hospitalization. Nevertheless it would appear that disseminated encephalomyelitis was the correct diagnosis in this instance.

General Comment

The diversity of opinion expressed in current literature concerning the agents responsible for production of the syndromes of optic neuritis and of retrobulbar neuritis is still impressive. It would appear that a few years ago there existed greater agreement on at least one etiologic factor, that of disease of the posterior ethmoid and sphenoid sinuses, than is apparent at present. Following the studies of Onodi, Loeb, Schaeffer and other earlier workers, sinusitis was believed to be largely the cause of these forms of neuritis and few other etiologic factors received consideration. This belief has been dispelled, to some extent at least, and while the literature still abounds in controversy on the subject, other responsible agents have gained in importance and that of sinusitis as a factor has declined. This is especially striking as one notes the increasingly greater reluctance to perform intranasal operations for relief of optic neuritis or retrobulbar neuritis in the absence of definite pathologic change in the sinus.

As noted by Campbell, a number of etiologic factors usually are considered at present. Recognizing that the significance of these varies to some extent with the medical center or clinic from which the data are derived, the following are enumerated in the order of their importance as determined

from the series that forms the basis of the present study: (1) early multiple sclerosis; (2) frank multiple sclerosis; (3) excessive use of ethyl alcohol and nicotine; (4) syphilis; (5) arterial spasm; (6) foci of infection; (7) plumbism; (8) cause undetermined; (9) excessive use of ethyl alcohol alone; (10) pituitary tumor; (11) undetermined intracranial lesion; (12) ascending myelitis and neuromyelitis optica; (13) pernicious anemia; (14) excessive use of tobacco alone; (15) arachnoiditis; (16) occupational exposure to methyl alcohol; (17) diabetes; (18) secondary glaucoma and (19) sinus disease. Additional causes have been listed by Campbell, Benedict, Wagener, Bedell, Foster Kennedy and others. These include the more common acute infectious diseases; toxic conditions from the use of quinine sulphate and its derivatives, of arsenic, iodoform, salicylates, thallium acetate and lead; allergy; myelogenous leukemia; menstruation, pregnancy and lactation; avitaminosis; tuberculosis and Leber's disease. Certain primary inflammatory and degenerative lesions of the central nervous system have been mentioned, such as encephalomyelitis and diffuse periaxial encephalitis but these occur very infrequently.

It would appear, then, that consideration of the causative factors can be made on a broader basis. It is evident that multiple sclerosis, if accepted as a primary disease of the central nervous system, usually accounts for approximately half of the reported cases of optic neuritis and retrobulbar neuritis. Other primary affections of the nervous system will include the various types of encephalopathy, myelitis, syphilis and such entities as Schilder's disease. The excessive use of alcohol and nicotine, respectively, in the form of potable spirits and smoking tobacco, would appear to constitute another distinct group of causes; however, the use of alcohol alone and of nicotine alone is also known to provoke optic neuritis or retrobulbar neuritis. These toxins, singly or in conjunction with one another, cannot be said to be the sole etiologic agents even when their excessive use is admitted. It is commonly accepted that neuritis and amblyopia from alcohol and tobacco are deficiency diseases, as noted by Carroll, Fine and Lachman, Wagener and Weir, and others, and that these toxic agents probably

are accountable only for the resultant anorexia from which the continued dietary indiscretions and subsequent neuritic manifestations derive. There should be included here the optic neuritis of menstruation, pregnancy and lactation, and that of the avitaminoses, and the postoperative, post-hemorrhagic and chronically cachectic conditions of protracted diseases, such as tuberculosis of the viscera, pernicious anemia and diabetes and other metabolic disorders. Numerically less important etiologic factors are the acute infectious diseases, toxic conditions owing to foci of infection, excessive treatment with toxic substances, industrial exposure to noxious commercial compounds, congenital familial causes such as Leber's disease, sinus disease and arterial and arteriolar spasm.

This nosology, as is apparent, undertakes a listing of the causes of optic neuritis and retrobulbar neuritis, not from the standpoint of the initial etiology but from that of the already existing disease.

Allergy as a cause has received occasional consideration. The belief was expressed by Stark that sensitization of the tissues of the sinuses and the orbits may be produced by bacterial proteins in the presence of a focus, or of foci, of infection. This sensitization would then produce local allergic activity on each fresh infection with the same bacteria or virus. Stark expressed the opinion that this reactivity could be held accountable in some instances for the appearance of optic neuritis. Other workers and subsequent investigators have given allergy a very definite causative rôle in pathologic changes in the ocular tissues. As Bedell pointed out, certain tissues, among which are included those of the eye, are attacked by allergens with greater frequency and intensity than are others. The iris, the lens and the optic nerve occasionally are attacked so rapidly and destructively as to constitute emergencies. Bedell stated specifically that some cases of retrobulbar neuritis, supposedly of unknown origin, are allergic and that it is possible that the tissue reaction results from bacterial or protein allergy. He expressed the belief that the sudden edema of the optic nerve in such cases probably does cause the syndrome bearing that name. Also the view was expressed that the ultimate factor in cases produced by various toxic agents, such as alcohol, quinine, nico-

tine, lead, and so forth, whether or not therapeutically administered, might be the resultant increased tissue sensitivity following the damaging use of any such agents.

Foster Kennedy has considered the subject from the very likely point of view of the neural phenomena exhibited. He hypothesized the probability of including, with the known allergic disorders of the more accessible surfaces of the body, neural allergic manifestations of obscure origin but possessing striking resemblance to undoubted localized external cutaneous phenomena such as urticaria. Thus, it would appear probable that the phenomena of serum sickness, angioneurotic edema, allergic encephalopathy, allergic convulsions, retrobulbar and optic neuritis, allergic headache and migraine, and possibly multiple sclerosis would possess a common pathogenesis on a biochemical-allergic basis. It was pointed out that analogic manifestations appearing in cases of urticaria and migraine, in the skin and meninges respectively, could be discussed in terms of similar morbid processes in those two widely separated ectodermic tissues. Continuing the hypothesis, Kennedy stated that, while the cause of multiple sclerosis is unknown and no allergic origin has yet been determined, "its episodes, its intermissions, the curability of its most acute crisis, its attack on the optic nerves, its neglect of sensory paths—all these things greatly resemble the happenings of localized allergic edemas after the central nervous system has come under fire." In support of this conjecture it was noted that in those rare cases in which the body of a patient who has had acute multiple sclerosis has come to necropsy, the recent plaques are not sclerotic but consist of infiltration with fluid of the nerve tissue surrounding the blood vessels. The agent causing this vascular permeability is unknown.

By analogy it is equally possible to hypothesize the initial origin of optic and retrobulbar neuritis from arterial or arteriolar spasm. As observed by Dawson in cases of retrobulbar neuritis associated with multiple sclerosis, the anatomic structure of the greater portion of the central nervous system, with particular reference to the vascular supply, should be considered. The finer branches of the arterial vessels terminate in ramifying end-arteries and it is these sites for which preference appears to

TABLE II. THERAPY INSTITUTED AT CLINIC

Patients	Agent
43	Intravenous injections of typhoid vaccine
14	Pilocarpine sweats
9	Quinine sulphate
8	Antisymphilitic drugs
6	Potassium iodide
6	Withdrawal of toxins: alcohol, nicotine, lead, and so forth
5	Improved dietary regimen
4	Liver extract
4	Protiodid of mercury
3	Hot baths
3	Rosenow's neurotropic antiencephalitic serum
2	Gold sodium thiosulphate
2	Ammonium chloride
2	Calcium lactate
2	Diathermy and massage
2	Roentgen therapy to skin
2	Sedation
1	Roentgen therapy to chiasm
1	Glaucoma routine treatment to eye
1	Intramuscular injection of sterile milk
1	Cabinet sweats
1	Sodium iodide
1	Insulin (diabetic regimen)
1	Medicated tampons to nasal mucosa

be shown in the lesions of multiple sclerosis; particularly is preference shown for the chiasm where there is a normal abundance of glial tissue.

It might be hypothesized further that the apparent oneness of focal areas or the single focal areas in optic neuritis or retrobulbar neuritis, as evidenced by the visual field data and by the information rarely obtained at necropsy, is supportive proof of the allergic etiology of the morbid process, the apparently single infection providing temporary immunity, other conditions being equal, to an immediate subsequent infection. The three patients whose cases have been reported in this paper might be cited as proof of the existence of exceptions to

TABLE III. TREATMENT OF FOCI OF INFECTION INSTITUTED AT CLINIC

Patients	Infection
3	Prostatitis
2	Pyorrhea
2	Gingivitis
1	Seborrheic dermatitis
1	Tonsillitis

TABLE IV. OPERATIONS PERFORMED AT CLINIC

Patients	Operation
48	Spinal puncture
7	Tonsillectomy
4	Craniotomy
3	Dental extraction
3	Encephalography
1	Cervical cauterization
1	Drainage of rectal abscess
1	Curettage of chalazion
1	Intranasal sinus operation

this thesis; however, it is more probable that there occurred, not reinfection, but extension of the morbid process following continued or increasing hypersensitivity to the presence of the etiologic agent.

Treatment

As corroborative evidence of the likelihood of optic neuritis and retrobulbar neuritis being allergic in origin, whether or not the involved tissue was previously damaged by some exogenous or endogenous toxic factor, there is offered the wealth of information in the literature on the therapeutic agents employed in its treatment. Derived from the present study, the data given in Tables II to VI inclusive indicate the type of therapeutic procedure usually instituted.

Occasionally craniotomy is performed, usually as a last desperate measure. The preoperative diagnosis in these instances is local chronic arachnoiditis or tumor, usually pituitary tumor, in the immediate vicinity of the optic chiasm. This was illustrated in Case 3.

Intranasal sinus operations are performed very much more often than not as an empirical measure; however, as Benedict point-

TABLE V. MEDICAL THERAPY EMPLOYED ELSEWHERE

Patients	Agent
9	Local medication to eye
6	Intravenous injections typhoid vaccine
4	Salicylates
4	Potassium iodide
4	Antisymphilitic drugs
3	Hot packs
3	Intravenous injection unknown drugs
2	Liver extract
2	Calcium lactate
2	Protiodid of mercury
1	Gold sodium thiosulphate
1	Deep roentgen therapy to chiasm
1	Insulin
1	Medicated tampons to nasal mucosa
1	Pilocarpine sweats
1	Magnesium sulphate
1	Tuberculin
1	Reducing compound
1	Quinine sulphate
1	Sodium nitrite (by mouth)
1	Withdrawal of alcohol and nicotine

ed out, they may have been of benefit in many cases because of the prolonged local congestion of the nasal mucous membrane and adjacent tissues subsequent to operation. Duggan has mentioned the possibility of antidromic vasodilator impulses to the optic nerve or chiasm, with resultant improvement in vision, as having occurred subsequent to the local ischemia and congestion of the intranasal tissues following application of medicated tampons to the mucosa. This idea, however, does not appear tenable clinically—too great and prolonged local specificity of action would have to be predicated.

A material increase of peripheral circulation is produced by specific vasodilators such as pilocarpine, papaverine, padutin, sweats, and so forth, and by foreign protein therapy, the latter appearing to be the most uni-

TABLE VI. OPERATIONS PERFORMED ELSEWHERE

Patients	Operation
7	Intranasal sinus operation
7	Dental extraction
6	Tonsillectomy
1	Decompression (cranial)
1	Prostatic resection
1	Salpingectomy
1	Ocular enucleation
1	Cauterization of chancre

formly efficacious and the most commonly employed single therapeutic measure in use at present. Killed typhoid bacilli in graduated doses of a commercially prepared stock vaccine are employed more often than any other nonspecific foreign protein. The typhoid vaccine is injected intravenously and is depended on for its immediate action in an acute condition (Benedict and Rucker).

The mechanism of the protein reaction in reference to ophthalmologic usage has been thoroughly reviewed by Woods, who quoted Petersen: "The foreign agent injected into the circulation may rapidly pass the capillaries of most tissues without bringing about an alteration and will finally be taken up by the reticulo-endothelium. But the endothelium of the capillaries in and about a chronic focus is altered. It is more permeable and responds to stimulation more readily than the unaltered endothelium. As a result, the chronic focus of infection will be subject to diffusion phenomena, increased metabolic activity, with greater penetration of enzymes and antibodies, while at the same time accumulated toxic material may be liberated. The reaction may take several forms. If very severe, the cells may become fatigued, the reversal delayed, and severe injury result to the patient either through digestion and softening, through the absorption of toxic material, or through the dissemination of the virus. If only moderate, the reversal of the status of the tissues will initiate a relatively long period of quiescence and ultimate improvement after primary augmentation of the symptomatology. If subminimal, the stimulus may

bring about general inhibition (rest) of the metabolic processes at the focus without apparent primary injury." Thus, a prolonged and definite alterative effect on certain tissues is produced and it is this effect which is desired in therapeutics rather than the more or less transitory changes produced by the administration of drugs.

Duggan, however, recently has reported favorable results from intensive intravenous injections of 10 per cent sodium nitrite in the treatment of retrobulbar neuritis on the theory that local anoxemia following vascular changes in the focal areas produced is the responsible morbid process. He observed, moreover, that retrobulbar neuritis is a misnomer if this assumption is correct and that further confirmatory treatment with vasodilators is essential before anoxemia can be accepted as proved.

Of the numerous vasodilators such as papaverine, padutin, nitrosceleran, the "cholinergic" group, the nitrites, and so forth, that can be used with safety, sodium nitrite is an excellent example. It is fairly well tolerated (Cushny) and provides a relatively prolonged effect when compared with certain others.¹¹ As has been noted, the length of time during which definite cellular alteration can be maintained is an important criterion of the efficacy of the therapeutic agent employed. The pharmacologic effect of the nitrites must be secured prior to their breakdown and excretion after administration. The destruction of the compound that takes place in the gastric juice when the substance is orally administered is moderately delayed when it is given intravenously. The exact effective time of action of various substances is unknown. Nevertheless, it would appear that the time of action of killed typhoid bacilli or other appropriate foreign protein can be judged more accurately than that of other substances and the dose, therefore, can be adjusted accordingly. Of course, as Duggan pointed out, the mechanisms differ by which nitrites and typhoid vaccine bring about peripheral vasodilation. That of typhoid vaccine and other nonspecific foreign proteins already has been mentioned. The nitrites, in contradistinction to the nonspecific, generalized effect of the foreign proteins, specifically affect vasodilation by means of depressing the vascular smooth musculature, but the peripheral vessels of the head and neck are

affected more markedly than are those of the trunk and extremities, which react comparatively minimally. This mechanism is not under the control of the vasomotor centers. Tolerance to both of these agents will develop in time, particularly if breaks do not occur in the series of injections; in conditions wherein other pathologic change is encountered the use of either of these agents will be contraindicated. Also, it cannot be denied that injections of typhoid vaccine or other foreign protein, which will produce a generalized reaction, will be more unpleasant for the patient than will be the administration of specific vasodilators such as the nitrites.

It is apparent at present, however, that the two substances just mentioned are the chief therapeutic aids in optic neuritis and retrobulbar neuritis. Other vasodilators will include such measures as pilocarpine packs, heat cabinet sweats, hot baths and hot packs, and are employed as adjuncts or alone when neither typhoid vaccine nor specific vasodilators can be tolerated.

There is little necessity for commenting on the universally accepted value of eradication of foci of infection, the withdrawal from exposure to proved or suspected toxins whether therapeutic or industrial, and abstinence from alcohol and nicotine. It has been shown, however, by Jolliffe, Colbert and Joffe, that alcohol can continue to be consumed without effect on the outcome of the disease when the diet is adequate and the vitamin needs are supplied, particularly in regard to the vitamin B complex. In nicotine amblyopia, on the other hand, withdrawal of the tobacco, in addition to instituting dietary changes and other therapeutic adjuncts, is necessary in order to effect both arrest of the process and improvement. In a recent review, Benedict and Wagener have considered the rôle of vitamin B in diseases of the eye and have expressed the opinion that experimental and clinical data are accumulating to indicate that deficiencies of vitamins B₁ and B₂ are more important than is generally realized in the etiology of affections, acute and chronic, of the optic nerve. The remarks of Winans and Perry were quoted as being applicable also to optic neuritis and to retrobulbar neuritis: "The nutritional background of a considerable portion of the population is such as to provide for the development of deficiency poly-

neuritis under a variety of conditions. Marked changes in the diet may decrease the intake of the vitamin B complex below the necessary minimum. Alcoholism, intestinal operations, and prolonged gastro-intestinal upsets, including the vomiting of pregnancy, may all serve to develop this disease. In any continued illness associated with loss of appetite, the possibility of the development of polyneuritis must be borne in mind."

References

1. Bedell, A. J.: Clinical manifestations of allergy in the eyes. *New York State Jour. Med.*, 36:959-966, (July 1) 1936.
2. Benedict, W. L.: Retrobulbar neuritis and disease of the nasal accessory sinuses. *Arch. Ophth.* 9:893-904, (June) 1933.
3. Benedict, W. L., and Rucker, C. W.: Use of foreign proteins in treatment of diseases of eye. *New Orleans Med. and Surg. Jour.*, 81:782-795, (May) 1929.
4. Benedict, W. L., and Wagener, H. P.: Nutritional diseases and the eye. The rôle of vitamin B. *Am. Jour. Med. Sc.*, 192:296-299, (Aug.) 1936.
5. Campbell, E. H.: Relationship of sinusitis to optic and retrobulbar neuritis with special reference to etiology and treatment. *Arch. Ophth.*, 16:236-247, (Aug.) 1936.
6. Carroll, F. D.: "Alcohol" amblyopia, pellagra and polyneuritis; report of 10 cases. *Arch. Ophth.*, 16:919-926, (Dec.) 1936.
7. Cohen, H.: Optic atrophy as the presenting sign in pernicious anemia. *Lancet*, 2:1202-1203, (Nov. 21), 1936.
8. Craig, W. McK., and Lillie, W. I.: Chiasmal syndrome produced by chronic local arachnoiditis. *Arch. Ophth.*, 5:558-574, (Apr.) 1931.
9. Dawson, J. W.: The histology of disseminated sclerosis. *Edinburgh Med. Jour.*, 17:229, (Oct.); 311, (Nov.); 377, (Dec.) 1916.
10. Duggan, W. F.: Use of vasodilators in treatment of retrobulbar neuritis. *Arch. Ophth.*, 16:380-399, (Sept.) 1936.
11. Edmunds, C. W., and Gunn, J. A.: Cushman's pharmacology and therapeutics. Philadelphia: Lea and Febiger, 1934, 786 pp.
12. Fine, Max, and Lachman, G. S.: Retrobulbar neuritis in pellagra. *Am. Jour. Ophth.*, 20:708-714, (July) 1937.
13. Friedenwald, J. S.: The pathology of the eye. New York: The Macmillan Co., 1929, 346 pp.
14. Grinker, R. R.: Neurology. Baltimore: Charles C. Thomas, 1934, 979 pp.
15. Hagedoorn, A.: The chiasmal syndrome and retrobulbar neuritis in pregnancy. *Am. Jour. Ophth.*, 20:690-699, (July) 1937.
16. Jolliffe, Norman, Colbert, C. N., and Joffe, P. M.: Observations on the etiologic relationship of vitamin B (B₁) to polyneuritis in the alcohol addict. *Am. Jour. Med. Sc.*, 191:515-526, (Apr.) 1936.
17. Kennedy, Foster: Allergic manifestations in the nervous system. *New York State Jour. Med.*, 36:469-474, (Apr. 1) 1936.
18. Loeb, H. W.: A study of the anatomic relations of the optic nerve to the accessory cavities of the nose. *Ann. Otol., Rhinol. and Laryngol.*, 18:243-274, (Mar.) 1909.
19. Onodi, A.: The optic nerve and the accessory cavities of the nose. *Ann. Otol., Rhinol. and Laryngol.*, 17:1-52, (Mar.) 1908.
20. Parker, W. R.: The mechanism of papilledema. *Arch. Neurol. and Psychiat.*, 14:31-34, (July) 1925.
21. Rosenow, E. C.: Cataphoretic velocity and localization of streptococci isolated from infected teeth of persons having systemic disease. *Jour. Am. Dent. Assn.*, 23:35-46, (Jan.) 1936.
22. Schaeffer, J. P.: The nose and olfactory organ. Philadelphia: P. Blakiston's Son and Co., 1921, 370 pp.
23. Stark, H. H.: Retrobulbar neuritis, secondary to diseases of the nasal sinuses. *Jour. Am. Med. Assn.*, 77:678-681, (Aug. 27) 1921.
24. Wagener, H. P.: Lesions of the optic nerve and retina in pregnancy. *Jour. Am. Med. Assn.*, 103:1910-1918, (Dec. 22) 1934.
25. Wagener, H. P., and Weir, J. F.: Ocular lesions associated with postoperative and gestational nutritional deficiency. *Am. Jour. Ophth.*, 20:253-259, (Mar.) 1937.
26. Woods, A. C.: Allergy and immunity in ophthalmology. Baltimore: The Johns Hopkins University Press, 1933, 176 pp.

THE THIRTIETH ANNIVERSARY OF THE MICHIGAN TUBERCULOSIS ASSOCIATION

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The title first written for this review was "The Thirtieth Anniversary of Organized Tuberculosis Work in Michigan." Accuracy and modesty, however, required that the title be rewritten. Records are clear that definite tuberculosis education of the lay public was begun in Michigan sometime during the decade before the year 1881. It would seem then that Michigan has seen perhaps sixty years of "organized tuberculosis work."

Dr. A. S. Warthin, writing in Ann Arbor in 1909 as secretary of the Michigan Association for the Prevention and Relief of Tuberculosis, refers to those earlier efforts. He says:¹

"In the 70's the State Board of Health began to hold, in different parts of the state, sanitary conventions to which the people of the locality were invited, and at which health matters were generally discussed. The writer has not at hand the printed proceedings of the earliest of these conventions, but he has been able to find some of them, and from these much of interest can be learned. At such a convention held in Battle Creek, March 29 and 30, 1881, Dr. Henry B. Baker, then secretary of the Michigan State Board of Health, made the following statement:

"The deaths reported from consumption in Michigan will average over 1,400 annually, and there is

evidence that the number reported should be much increased in order to equal the deaths which actually occur; probably 2,000 persons die in this state every year from consumption. And yet, compared with many other states, Michigan is a very healthful state, and we are accustomed to regard these deaths as inevitable—indeed, as a rule, they seem to be when once consumption has been contracted—and up to this time no effort has been made to prevent the spread and occurrence of this disease. It may serve to awaken enthusiasm sufficient to start some effort for its study and restriction, if we consider that consumption is now proved to be communicable from man to lower animals; that there is good evidence that the disease may be communicated from animals affected with it to man—as, for instance, to susceptible children by means of milk of

¹Report, Michigan Association for Relief and Prevention of Tuberculosis, 1908-09, pp. 5, 6.

a tuberculous cow, to any susceptible person by means of insufficiently cooked meat of a tuberculous animal; that there are hundreds of tuberculous cows and other animals; and that consumption is probably spread among people in unventilated rooms by breathing air which has come from the lungs of persons suffering from consumption. The evidence of this last proposition is twofold—because from statistical and other evidence some have been convinced of the truth of it, and lately experiments have shown that dogs will contract the disease if caused to breathe air in which tuberculous matter has been atomized. Let us place these facts by the side of those others which the vital statistics give us—namely that, counting all children and grown people in this state, at least twelve per cent die from consumption—an average equal to every eighth person you meet in this State; and we may add that the death-rate is reported about double among persons over fifty years of age; thus we begin to see abundant reason for tremendous effort to learn the whole truth, and then for another effort for the prevention of this great waste of human life, which is going on among us.

"At the same convention, Dr. Cogshall of Flint, Michigan, read a paper with the following title: Consumption: Is It a Contagious disease? What Can Be Done to Prevent Its Ravages? In this paper, Dr. Cogshall very ably summed up all the evidence concerning the contagious character of tuberculosis known at that time. He went fully into the work of Villemin, who, as early as 1865, had demonstrated that tuberculosis might be caused in the lower animals by inoculation, by feeding and by inhalation of the sputum from the lungs of consumptives."

Dr. Warthin continues:²

"It is well to call attention to the fact that this convention at Battle Creek occurred in March, 1881, just one year before Robert Koch announced the discovery of the tubercle bacillus. For twenty years or thereabouts, the Michigan State Board of Health held two or more public sanitary conventions each year in different parts of the State, and at many of these gatherings the communicability of tuberculosis was unequivocally taught to the laity. For instance, at such a convention held at Vicksburg, Michigan, in December, 1889, Dr. Baker summarized his paper in which he dealt with the communicability of this disease as follows:

(1) 'Probably by far the most common mode of spread of consumption is by means of dust from the dried sputum spit out by consumptive persons.

(2) 'When this dust is breathed, the danger of its active principle being able to reproduce and cause consumption in the person who has inhaled it, is not as great among persons who are well nourished and in vigorous health, and whose air-passages are free from any inflammation or abrasion, as among persons not in such condition.

(3) 'The specific cause of consumption may enter the human body with the food or drink, in which case the danger of its being able to gain a lodgment, and to increase within the body and cause the disease, is not as great to those who are in perfect health and whose alimentary canal is sound throughout as to those who are not in such good condition.

(4) 'The specific cause of consumption may enter the body through a cut, abrasion or broken surface, in which case vigorous health probably lessens the danger of the permanent lodgment of the virus, and the consequent causing of the disease.

(5) 'The dried sputum is not the only source of consumption. The milk and flesh of animals that have this disease frequently contain the specific cause of the disease. (It is now known that the milk of cows sick with this disease sometimes contains the germs of it even when no disease of the udder can be discovered.)'

"At a convention held at Manistee, June, 1888, Dr. L. S. Ellis made the following interesting statement: 'I have in mind a family which has almost become extinct through this disease, and there are unmistakable signs that the rest of the family will go. Why does the disease thus follow this one family? It seems to me that the best explanation is the germ theory of this disease. A few months ago I saw a consumptive patient expectorate on the floor. You can readily see how, this sputum becoming dry, the whole atmosphere would become infected. This family moved out of this house and a friend of mine wished to move in. I felt obliged to tell him that he might as well move into a house infected with smallpox.'

"We might give numerous quotations from the proceedings of these sanitary conventions, but enough has been given to show that Michigan began public education concerning the infectious character of tuberculosis many years ago. However, the crusade against tuberculosis inaugurated and carried out by the Michigan State Board of Health was not confined to these public conventions. At the request of this Board the Legislature of 1895 made it obligatory on all the teachers in all the public schools of the state to give the students information concerning the manner in which infectious diseases are spread. The State Board of Health has furnished the teachers with leaflets and pamphlets, and the teachers have been required to impart this instruction to the students. In some localities the teachers have done their duty along this line; in others they have wholly neglected the law and have thrown the leaflets from the State Board of Health into the waste-paper basket. Many School Boards are not even aware of the existence of such a law. The patrons of our public schools should see that the teachers of the state comply with this very wise and beneficent law. Inefficiently as the provisions of this law have been carried out, it is no doubt true that a fairly large proportion of the young people in this state are already familiar with the methods by which tuberculosis and other infectious diseases are spread. The Michigan State Board of Health was also one of the first, if not the very first State Board in the union to declare tuberculosis a disease dangerous to the public health, and to demand that physicians report cases of this disease. We regret to say that this has never been carried out as it should have been.

"In 1890, an agitation for the establishment of a State Tuberculosis Hospital was started by members of the Medical Department of the State University. In 1894, a bill providing for the building of a Tuberculosis Hospital in Ann Arbor in connection with the University Hospital was drawn up but unfortunately was never put before the Legislature, owing to the mistaken opposition of some who thought the establishment of such a hospital in Ann Arbor would be a menace to the University. This bill was a most wise and enlightened one and would have greatly enhanced Michigan's reputation as one of the progressive states of the Union, inasmuch as it would have saved the state the shame, fifteen years later, of seeing its tuberculosis paupers still herded in the County Almshouses without proper care or treatment. Such unfortunates the proposed bill planned to receive and treat in the tuberculosis hospital at Ann Arbor. In 1906, the first State

²Report, Michigan Association for Relief and Prevention of Tuberculosis, 1908-09, pp. 7, 8, 9, 10.

Tuberculosis Sanatorium was finally established at Howell, providing, however, only for a limited number of incipient cases.

"It will be seen from the preceding that Michigan theoretically has been very early in the field of anti-tuberculosis work. If, practically, it has fallen behind, it is due simply to the fact that the great mass of inhabitants of the state have not yet been educated or aroused to an understanding of the full significance of tuberculosis and its ravages. They have yet to learn that the lives and happiness of every citizen of the state are affected by the presence of this disease in our midst, and that this plague is wholly unnecessary and preventable. While we may be proud of the fact that Michigan was a pioneer in so far as its most excellent law of 1895 is concerned and in the promulgation of ideas far ahead of the times in which they were proposed by men belonging to its Board of Health and the University or who were influenced by these, a still greater glory awaits the state in the education of all its citizens to an understanding of the meaning of its laws and their enforcement. As a factor in this work of education the Michigan Association for the Prevention and Relief of Tuberculosis finds its reason for existence."

Thus wrote Dr. Warthin nearly thirty years ago.

To be able to evaluate the work of the Michigan Tuberculosis Association during the thirty years of its existence, that background is important. It demonstrates more clearly than can be seen in the history of tuberculosis work in most states what was the force that impelled the tuberculosis association into existence. More than a quarter century of sincere effort by brilliant medical men had led apparently only to disappointing, public indifference. Early laws were disregarded. Early efforts to establish sanatorium care were thwarted. There was no appreciable decrease in "consumption." Something more needed to be done. The intensely interested medical group felt impotent.

Appearances to the contrary notwithstanding, these men had made important progress along the road toward tuberculosis control. They had uncovered one of the imponderables in tuberculosis. They had demonstrated that there are problems in tuberculosis that lie beyond medicine. And they found that progress in tuberculosis control is almost immeasurably slow. They were among the first in this nation to glimpse the truth about tuberculosis, as a medical problem and as a social problem. They learned to expect that there probably would be no crashing victory against tuberculosis, in spite of high hopes for a specific. And they foresaw, as can be gathered from their writings, that patience and persistence

over many years would be needed to win against the disease. They became convinced they must have help.

The names of the physicians who were the leaders against tuberculosis in Michigan before 1908 make a list identical with Michigan's medically great of that period. One might expect resourcefulness from such a group. Therefore, it is not surprising that they should have seen the advantages to be gained for their purpose, from inviting leading lay men and women to join with them in an association for the elimination of consumption. They saw the value. They formed the association, and their spirit has been its guide ever since. Throughout its entire history the policies of the Michigan Tuberculosis Association have followed the policies of Michigan's medical leaders. Its officers have continued to be predominately medical. Its lay leaders have never been conscious of any other belief than that their program, to succeed, must have the coöperation of the medical profession. In that light and under those convictions the association of 1907-08 was formed and proceeded through the years. Michigan's outstanding success in tuberculosis control today bespeaks the wisdom of, and the constancy to, the chosen course.

The medical core around which the tuberculosis association formed was made up of these men:³

Dr. Collins H. Johnston, *Chairman*, Grand Rapids; Dr. C. G. Jennings, Detroit; Dr. Henry J. Hartz, Detroit; Dr. George Dock, Ann Arbor; Dr. Victor C. Vaughan, Ann Arbor; Dr. Frederick G. Novy, Ann Arbor; Dr. C. B. De Nancrede, Ann Arbor; Dr. Aldred Scott Warthin, Ann Arbor.

Later Dr. C. G. Jennings was elected chairman of the committee and Dr. A. S. Warthin its permanent secretary. The actual organization of the association under a constitution and with the election of officers took place in Detroit at the Hotel Pontchartrain on February 21, 1908. The following officers and members for the Executive Committee were elected at this meeting:⁴

Officers.—President, Dr. C. G. Jennings, Detroit; First Vice President, Mrs. Huntley Russell, Grand Rapids; Second Vice President, Dr. E. T. Abrams, Dollar Bay; Secretary, Dr. A. S. Warthin, Ann Arbor; Treasurer, Dr. H. J. Hartz, Detroit.

³Report, Michigan Association for Relief and Prevention of Tuberculosis, 1908-09, p. 11.

⁴*Ibid.*, p. 47.

Executive Committee.—Dr. V. C. Vaughan, Chairman, Dr. Guy L. Kiefer, Mr. D. E. Heineman, Mrs. Huntley Russell, Dr. F. W. Shumway, the President and Secretary, ex-officio.

Many local committees were formed to stimulate interest in the state association. The chairmen of these local groups as reported in 1909 were as follows:⁵

Adrian—Dr. George E. T. Morden.
 Albion—Dr. George C. Hafford.
 Allegan—Dr. W. E. Rowe.
 Alma—Dr. Ira N. Brainerd.
 Alpena—Dr. James D. Dunlop.
 Ann Arbor—Dr. V. C. Vaughan.
 Au Sable—Dr. J. J. Fitzgerald.
 Bad Axe—Dr. W. T. Herrington.
 Bangor—Dr. N. A. Williams.
 Battle Creek—Dr. A. S. Kimball.
 Bay City—Dr. H. B. Landon.
 Belding—Dr. William Bell.
 Bellaire—Dr. William A. Evans.
 Benton Harbor—Dr. Fred R. Belknap.
 Bessemer—Dr. Frank R. Loope.
 Big Rapids—Dr. W. T. Dodge.
 Birmingham—Dr. C. M. Raynale.
 Blissfield—Dr. Mary E. Newcomb.
 Cadillac—Dr. B. H. McMullen.
 Calumet—Dr. A. T. Lawbaugh.
 Caro—Dr. Fred Bender.
 Cassopolis—Dr. George A. Hughes.
 Charlevoix—Dr. Robert Armstrong.
 Charlotte—Dr. W. H. Rand.
 Cheboygan—Dr. D. G. Lanton.
 Coldwater—Dr. Samuel Schultz.
 Delray—Dr. B. G. Monkman.
 Detroit—The Detroit Society for the Study and Prevention of Tuberculosis.
 Dowagiac—Dr. John H. Jones.
 Durand—Dr. James A. Rowley.
 Eaton Rapids—Dr. James B. Bradley.
 Elk Rapids—Dr. B. H. Morse.
 Escanaba—Dr. Oscar Breitenbach.
 Fenton—Dr. M. B. Smith.
 Flint—Dr. B. Burr.
 Frankfort—Dr. Charles P. Doyle.
 Grand Haven—Dr. William De Kline.
 Grand Rapids—Dr. Collins Johnston.
 Greenville—Dr. A. W. Nicholls.
 Hancock (Houghton County Branch)—Secretary: Miss Helen Dunston.
 Harbor Beach—Dr. C. B. McKenzie.
 Hastings—Dr. G. W. Lowry.
 Hillsdale—Hon. W. H. Sawyer, M.D.
 Holland—Dr. Henry Kremers.
 Holly—Dr. Thos. E. McDonald.
 Howard City—Dr. Adelbert Martin.
 Howell—Dr. W. C. Huntington.
 Hudson—Dr. F. J. McCue.
 Ionia—Dr. Oscar L. Long.
 Ithaca—Dr. I. N. Monfort.
 Jackson County—Dr. Nathan Williams.
 Jonesville—Dr. Wm. H. Ditmars.
 Kalamazoo—Dr. David J. Levy.
 Kalkaska—Dr. E. B. Babcock.
 Lansing—Dr. F. W. Shumway.
 Lapeer—Dr. H. E. Randall.
 Ludington—Dr. Geo. E. Gray.
 Manistee—Dr. Albert S. Payne.
 Manistique—Dr. G. M. Livingston.
 Marine City—Dr. A. M. Burnham.
 Marquette—Dr. F. McD. Harkin.
 Marshall—Dr. S. K. Church.

Mason—Dr. Gertrude Campbell.
 Menominee—Dr. Robert Marriner.
 Midland—Dr. Henry J. Johnson.
 Mohawk—Dr. Albert R. Tucker.
 Monroe—Dr. Charles T. Southworth.
 Morenci—Dr. Chas. A. Blair.
 Mt. Clemens—Dr. Henry Taylor.
 Mt. Morris—Dr. W. H. Graham.
 Mt. Pleasant—Dr. S. E. Gardiner.
 Munising—Dr. Theodore W. Scholtes.
 Muskegon—Dr. F. W. Garber.
 Nashville—Dr. Francis Schilling.
 Negaunee—Dr. John H. Andrews.
 Niles—Dr. F. N. Bomine.
 Onaway—Dr. John Young.
 Otsego—Dr. George G. Taylor.
 Ovid—Dr. James E. Taylor.
 Owosso—Dr. A. M. Hume.
 Paw Paw—Dr. Wilbur F. Hoyt.
 Petoskey—Dr. A. G. Owen.
 Plymouth—Dr. A. E. Patterson.
 Pontiac—Dr. Stuart E. Galbraith.
 Port Huron—Dr. Chas. B. Stockwell.
 Portland—Dr. Robert W. Alton.
 Quincy—Dr. W. H. Baldwin.
 Reading—Dr. Daniel Horatio L. Foster.
 Reed City—Dr. Horatio L. Foster.
 Romeo—Dr. William Greenshields.
 Saginaw—Dr. W. F. English.
 Sebewaing—Dr. Bernhard Friedlander.
 Shelby—Dr. J. D. Buskirk.
 St. Clair—Dr. J. W. Inches.
 St. Johns—Dr. M. Weller.
 St. Joseph—Dr. Frank M. Gowdy.
 St. Louis—Dr. Aaron R. Wheeler.
 Sault Ste. Marie—Dr. E. H. Webster.
 Sturgis—Dr. F. W. Robinson.
 South Haven—Dr. J. D. Carnes.
 Tecumseh—Dr. Herbert R. Conklin.
 Three Rivers—Dr. Frank C. Kinsey.
 Traverse City—Dr. Jas. Munson.
 Vicksburg—Dr. Chas. McKain.
 West Branch—Dr. F. S. Love.
 Wyandotte—Dr. T. J. Langlois.
 Ypsilanti—Dr. H. B. Britton.

How like a possible 1937 report does this item read in the first report of the secretary of the Michigan Tuberculosis Association. Under the heading *Michigan State Medical Society* he writes:⁶

"The Committee on Legislation and the one on Tuberculosis from the State Medical Society have coöperated in the preparation of a Tuberculosis law modeled after the New York law, but modified in certain respects and we think an improvement upon the New York law. The energies of the officers of the State Tuberculosis Association have been given untiringly during the last several months in arousing public sentiment in favor of the passage of such a law. Many petitions have been secured and letters written to senators and representatives. The result of all this effort has been most encouraging. On February 15 a committee composed of Dr. V. C. Vaughan, Dr. F. W. Shumway, Dr. H. J. Hartz, Dr. Guy L. Kiefer, and Dr. A. S. Warthin met at Lansing and conferred with the Hon. Mr. Wood and the House Committee on Public Health. The bill now in the Legislature represents the efforts of the State Anti-Tuberculosis Association, aided by the committees of the State Medical Society."

⁵Report, Michigan Association for Relief and Prevention of Tuberculosis, 1908-09, pp. 57-126.

⁶Ibid., pp. 129, 130

In closing his report the secretary says under date of February 21, 1909:⁷

"In conclusion, the Secretary respectfully submits this report of the year's work to the members of the Association in the belief that its publication will have a moral effect in strengthening the work throughout the State. That there is a tremendous need for such an anti-tuberculosis campaign in the State of Michigan cannot be doubted. The mass of the people are ignorant of the significance of tuberculosis, and consequently apathetic. Our one good educational law is, in consequence, not enforced. Few anti-expectoration laws have been enacted in our cities, and none of them enforced. We have but one State Sanatorium, and that for incipient cases only. We have no provision for the much more pressing need of proper care for advanced cases. If our anti-tuberculosis bill pass, surely our first year's work must be regarded as most successful.

"The labors of the Secretary have steadily increased. Already the work is greater than anyone who has his own duties to attend to can manage with justice to himself. The point has been reached where the work must be put upon a sound business basis."

ALDRED SCOTT WARTHIN, M.D.,
Secretary.

Mindful of the need, continuous and intelligent effort has been directed against tuberculosis in Michigan. In this effort the Michigan Tuberculosis Association has acted chiefly as an entrepreneur. Medical leaders, civic leaders, political leaders, financial leaders, club leaders—all persons of influence, in Michigan, have been called upon to contribute to the tuberculosis campaign during these years. Their personal interest, their time, thought, money, and influence, in unbroken stream and in countless steps along the way, have made possible the present achievement. The pennies of men, women and children in all walks of life—from the lowly to our financially exalted—have supplied, through the tuberculosis Christmas seal sale, the financial sinews for the effort. Year after year for thirty years Michigan's citizens have responded to this call for funds.

The years have brought better laws, and because these laws have been backed with public understanding they are perhaps better enforced. The years have brought hospitals and have seen the mass information on tuberculosis lifted somewhat nearer known medical truth, with a consequent increased willingness among the sick to coöperate intelligently with their doctors. The years have witnessed a reduction in the tuber-

culosis death-rate. For Michigan this rate at present is in the low forties per hundred thousand. It is still a high death-rate for a communicable disease about which so much is known.

It seems reasonable to expect that continued reduction of the rate will probably not be so easily accomplished as has the past gain. Already there is a noticeable tendency in the curve to level off. Response to education may be expected to have occurred earliest among the more intelligent. The islands of high rates left exposed as the general rate recedes to lower levels offer special problems: economic, racial, intellectual. Progress downward in these special, high rate groups, and continued progress downward for the general rate can be accomplished, however. The same methods, and the same qualities of patient, kindly pressure without duress, outlined by the founders of this association—these characteristics alone found to have been successful over the years in tuberculosis control—these factors intensified, but carefully, thoughtfully, persistently and inoffensively applied, should press tuberculosis permanently into the lowest brackets for communicable diseases. Yet this most desirable end will not be quickly accomplished. It cannot be done under any kind of whip if experience is any guide. The enthusiasms of those most anxious to serve need to be carefully controlled. The "consumptive" still is timid and easily frightened into hiding. Family and friends resent even the faintest suggestion of harshness in those who would help. These things we have learned in the past thirty years.

Today the Michigan Tuberculosis Association still calls to the people of the commonwealth in the name of coöperative unselfishness. It enjoys the good-will and confidence which an honest and sincere effort in behalf of the public good deserves. The path up through the years was not travelled without occasional error. But it seems that success attends the work of this association of high-minded men and women. Their promise for the future is written. It has been written in the accomplishments of the past. They hope to carry on into the future in the manner of which their mentor, the medical profession of Michigan, may continue to be proud.

⁷Ibid., p. 166.

SICKLE CELL ANEMIA: BONE MARROW STUDIES

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There are very few cases of sickle cell anemia brought to necropsy in comparison to its incidence. The most important findings at necropsy are revealed in the study of the blood, liver, spleen and bone marrow. The findings in the bone marrow at necropsy, as reported by many observers in the literature, are as follows: it is usually abundant, bright red, thin in consistency, the reticular spaces are filled with erythrocytes intimately mingled with leukocytic constituents of the marrow and large clusters of sickle shaped erythrocytes may be seen between the capillaries.

A study was made of the bone marrow of a patient with severe active sickle cell anemia. The bone marrow was secured through sternal puncture. It was thought that a study of the bone marrow in the living patient with severe active sickle cell anemia might differ from the findings obtained at necropsy. A study of the literature showed no recordings of sternal puncture findings in sickle cell anemia.

The sternal puncture was made on B. R., colored male, aged twenty-one; complete case report appeared in *THE JOURNAL* of the Michigan State Medical Society of June, 1935. This patient has been under close observation during the past five years. There are no foci of infection present. There has been no intervening intercurrent infection. The presence of tuberculosis has been thoroughly ruled out. The findings presented, therefore, are those that exist in severe

active sickle cell anemia, and not modified by any other pathology.

On February 12, 1936, the sternal puncture was performed and a hematologic study made of both the bone marrow and the peripheral blood for comparison (Table I).

Several experimental studies were then made of the characteristics of the sickling phenomena of the erythrocytes of the bone marrow.

Fresh bone marrow was placed on a microslide and immediately sealed with wax. (Fig. 1). This preparation shows definitely that sickling of the erythrocytes occurs immediately upon their formation and not as a result of changes taking place within the cell or due to certain forces within the blood serum. This preparation contains only the constituents of the bone marrow and has had no contact with the blood serum in the peripheral circulation.

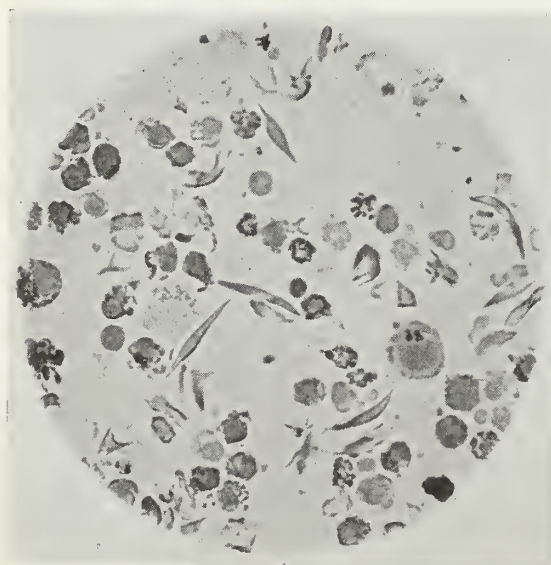


Fig. 1. Fresh bone marrow placed on a slide and immediately sealed with wax. (Photo after six hours' standing.)

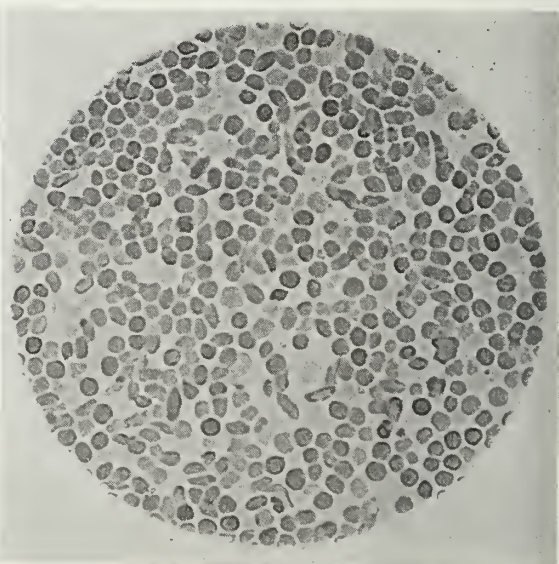


Fig. 2. Bone marrow repeatedly washed in 0.85 per cent saline solution until red cells assumed the maximum of round shape.

SICKLE CELL ANEMIA—ROBINSON

TABLE I. HEMATOLOGIC STUDY OF PERIPHERAL BLOOD AND BONE MARROW

Peripheral Blood		Bone Marrow	
Reticulocytes	24.5	Sternal puncture 1,000 cells counted	App. Nor. %
Color Index	1.0	Reticulocytes (in per cent of R.B.C.'s)	0.8—5
Hemoglobin	46	Megaloblasts	2 — 4
Erythrocytes	2,100,100	Normoblasts	5 — 14
Leukocytes	8,150	Megakaryocytes	1 — 3
Differential		Mean Diameter of R.B.C.'s	7.3—7
Metamyeloc. Juv. 2		Leukoblast	1 — 3
Neutroph. Stab. 8		Premyelocyte	3 — 5
Neutroph. Segm. 14	28	Myelocyte Eo.	0.4—2
Eo. 2		Myelocyte Bas.	0 — 0
Bas. 2		Myelocyte Neutroph.	2 — 12
Lym.	70	Metamyelocyte Juv.	9 — 16
Mono.	2	Neutroph. Stab	17—22
Platelets	210,300	Neutroph. Segm.	16—20
Maximum Diameter of R.B.C.'s	11	Eo.	0 — 1
Minimum Diameter of R.B.C.'s	5	Bas.	0 — 0
Mean Diameter of R.B.C.'s	7.8	Lym.	2 — 4
		Mono.	2 — 4

Remarks

Severe erythrocytopenia — moderate macrocytic. Marked polychromasia—severe anisocytosis and poikilocytosis. Small number of r.b.c.'s showing stippling and Jolly bodies. Large number of crescentic r.b.c.'s.

Among 100 leukocytes: Normoblasts 4 per cent

Reticulocytes (hyperregeneration) Group A***B*.

Thrombocytes: Moderately below min. normal. M.D. ranges from 1 u to 5 u. Few fragments of megakaryocytes 7.1 u (hyperregeneration).

Neutrophilic series: Severe neutropenia—moderate left shift. All neutrophils show various degrees of toxic damage. Clumping of the cytoplasmic granules is especially prominent.

Lymphoid series: The majority of the elements are of the small adult type showing no specific deviation from normal. Few medium sized cells show a few small vacuoles in the cytoplasm.

Monocyte series: The elements show no specific deviation from normal.

The wet blood preparation showed after twenty-four hours 96 per cent of sickling, remaining about the same after fifty-six hours.

Bleeding time 6 min.

Coagul. time 3 min.

Hematologic Diagnosis—Sickle cell anemia.

Remarks

Erythropoietic Tissue.—From the bone marrow study it is apparent that no particular embryonic hyperplasia of the erythropoietic tissue was present at the time the marrow puncture was made. However, considering the large number of reticulocytes, it seems that almost mature forms are rushed into the peripheral circulation (supply and demand are apparently on even levels). This may explain the low number of normoblasts observed in the peripheral blood, as well as the same mean diameter of the red cells in the bone marrow and peripheral blood.

Myelopoietic Tissue.—Moderate embryonic hyperplasia associated with apparent maturation arrest of the neutrophilic series.

This status explains the low number of mature elements in the peripheral blood. Many of the stab forms and some metamyelocytes show various degrees of toxic changes. Vacuolation of the cytoplasm is especially prominent. It seems that a toxic agent is inhibiting myeloid maturation and causing hyperplasia of the embryonic cells. Lymphoid cells are present in normal number, ruling out lymphoid replacement in the bone marrow. The monocytes and plasma cells show normal morphology. As a whole the bone marrow findings are in accord with the peripheral observations. Wet fresh preparations made of the bone marrow showed almost immediately sickling of the erythrocytes. After twenty-four hours 96 per cent of the cells were sickled. This seems to favor the theory that the sickle tendency is an hereditary disturbance of the erythropoiesis.

The erythrocytes of the bone marrow were repeatedly washed in 0.85 per cent saline solution until they assumed the maximum of round shape (Fig. 2). This study shows that sickle cells, after being thoroughly removed from serum and placed in physiological saline solution, assume the round form and tend to remain so as long as they are suspended in physiological saline solution. A microphotograph of this same preparation taken after six days of standing shows the same round forms, but many of

the cells show a change in shape when pressure is applied. This same study repeated with the peripheral blood showed the same findings. Since the sickling phenomenon is a constitutional abnormality of the erythrocytes probably traceable to a defect in their formation in the bone marrow, there is no reason to expect the erythrocytes of the bone marrow to be different from the erythrocytes of the peripheral circulation.

The washed sickle cells that had assumed the round form in physiological saline solu-

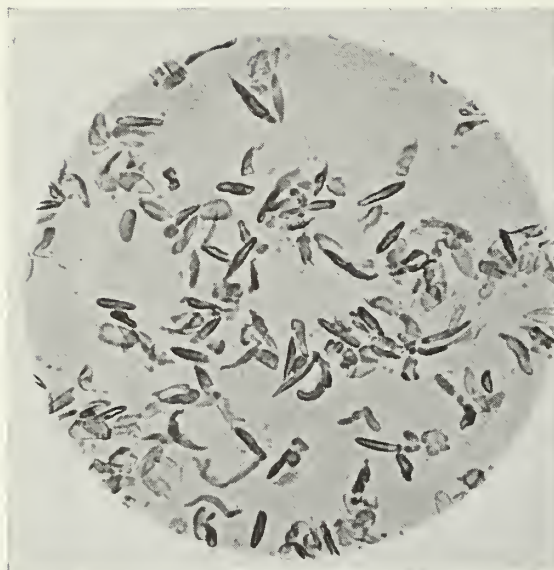


Fig. 3. Washed cells placed in patient's blood serum. Note sickling. (Photo after six hours' standing.)

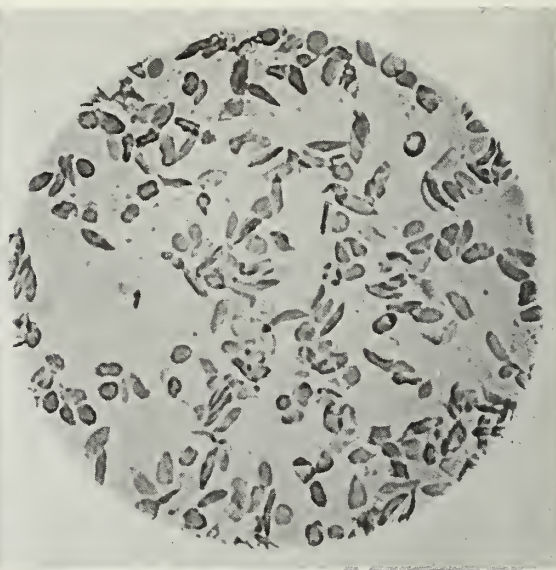


Fig. 4. Washed cells placed in normal type 4 serum (patient is type 4). Note sickling. (Photo after six hours' standing.)

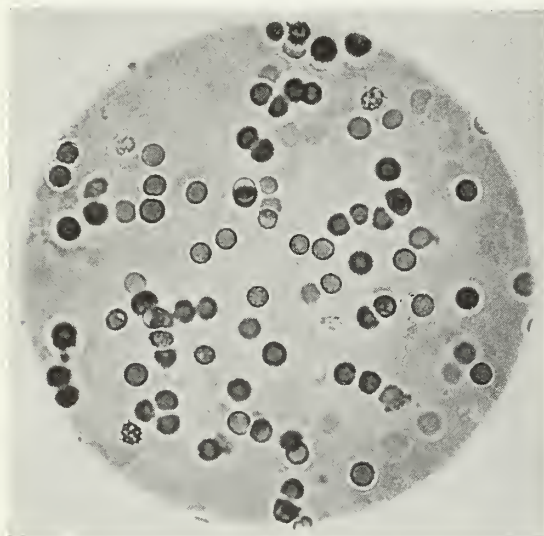


Fig. 5. Normal type 4 blood placed in patient's serum. Note no sickling. (Photo after six days' standing.)

tion were replaced into the patient's own serum and also in the serum of a normal individual of the same blood type (Figs. 3 and 4). The results, as seen in the microphotographs, were the same. The washed sickle cells again resumed the sickle shape in both the patient's own serum and in normal blood serum of the same type. These findings further prove that the sickling phenomenon is a constitutional abnormality of the erythrocytes due probably to a defect in formation in the bone marrow.

Normal erythrocytes of the same serum type were thoroughly washed in physiological saline solution and then placed in the

serum of patient after thoroughly removing the sickled erythrocytes. No change occurred in the normal erythrocytes even after six days standing (Fig. 5). This further gives evidence that the serum has no effect on the sickling of the erythrocytes.

Conclusions

A hematologic study of the sickling phenomenon of the erythrocytes of the bone marrow in a patient with severe active sickle cell anemia reveals findings that are in accord with the observations made on the sickle cells in the peripheral circulation. The bone marrow revealed no particular embryonic hyperplasia of the erythropoietic tissue. The myelopoietic tissue showed moderate embryonic hyperplasia associated with apparent maturation arrest of the neutrophilic series.

Sickle cells, after being thoroughly washed in physiological saline solution, will assume the round shape and tend to remain so in physiological saline solution. They will again resume the sickle shape when replaced in their own serum or in that of a normal person of the same blood type. Normal erythrocytes of the same blood type will not assume the sickle shape in the serum of a patient with sickle cell anemia even after long standing.

* * *

Sincere appreciation is expressed to M. Schleicher, hematologist for Parke-Davis and Company at the Anemia Laboratory of the Out-Patient Department at Harper Hospital, for his valuable assistance.

ATTEMPTED SUICIDE WITH INSULIN

DOUGLAS DONALD, M.D.

and

LINUS J. FOSTER, M.D.

DETROIT, MICHIGAN

In 1934 Beardwood¹ reported in detail a case of attempted suicide by insulin. The patient, a diabetic, had taken 390 units of insulin, and was admitted to the hospital in collapse. She subsequently recovered, following the administration of large amounts of dextrose intravenously and by mouth. Beardwood also mentions briefly one other case of attempted suicide by insulin: this on the part of a non-diabetic physician who took a large dose but subsequently recovered. This case was not reported in detail because of inadequate laboratory work. In a review of the literature he was able to find but one other case of insulin being taken with suicidal intent, and in this case only 20 units were taken.

A further search of the literature reveals no other reports of attempted self-destruction by this means. The purpose of this communication is to place on record a fourth case.

The patient (J. A.), male, aged twenty-six, was admitted to the Evangelical Deaconess Hospital, Detroit, Michigan, on January 5, 1933, at 9:15 P. M. He was unconscious on admission and was having constantly recurring generalized convulsions. Temperature was 99.2 (axilla); pulse 126; respirations 36, deep and stertorous.

History was obtained from friends. The patient had been on an alcoholic spree for the past twenty-four hours. After a few drinks he had discussed with a physician various ways of committing suicide, and had learned from the doctor that it was presumably possible to kill a person by an overdose of insulin without leaving any trace of the cause of death. On the day of admission he was seen by a bartender to give himself two hypodermic injections. When the latter remonstrated he stated that he was a diabetic and was following the doctor's orders. Later in the day he expressed a desire to lie down and was put to bed in another room in the establishment. At 8:00 P. M. he was found unconscious and having repeated convulsive seizures. An empty 10 c.c. bottle of insulin U 20 and a standard insulin syringe were found beside the bed. The patient was not diabetic.

Past History: He had malaria in 1927. He had been a "spree drinker" for years. On these occasions he was frequently depressed, and on a previous occasion had attempted suicide by slashing his left wrist with a razor blade.

The patient was seen by one of us (D. D.) at midnight of January 5, 1933. At this time he had already been given 50 c.c. of 50 per cent glucose intravenously, one ampoule of caffein sod. benzoate and 1/60 gr. strychnine by hypodermic. He was in a deep coma, with constant muscular twitchings and having generalized convulsions at ten minute intervals. The pupils were widely dilated but reacted normally. There was marked sweating. The heart was negative except for rapid rate. Blood pressure 128 systolic, 82 diastolic. Lungs were clear, abdomen negative. Tendon reflexes all equal and hyperactive.

Twenty-five gms. of glucose were given in 50 per cent solution intravenously and 1/4 grain of

morphine subcutaneously. The glucose was repeated in the same dose with 200 c.c. of saline at 2:00 A. M., at 4:45 A. M. and at 8:30 A. M., and morphine 1/4 grain was given at 1:45 A. M. and at 4:45 A. M. to allay restlessness. The convulsions ceased by 2:00 A. M., but the muscular rigidity remained, there were frequent twitchings and the patient remained in deep coma. Urination was involuntary. The temperature had risen to 102 (axillary) at midnight and at 8:00 A. M. was 101. Pulse had dropped to 100 and the respirations to 20 at 8:00 A. M., 1-6-33.

Unfortunately, during this period no blood chemistry determinations were made. At 9:30 A. M., the patient having received 100 gms. of glucose intravenously in twelve hours, the blood sugar was 125 mgms. per 100 c.c. of blood, N.P.N. 27.2 mgms., and creatinin 136 mgms. per 100 cc. of blood; at 11:30 A. M. blood sugar, 125 mgms., and at 4:00 P. M. 148 mgms. In the meantime 25 gms. more of glucose were administered in 500 c.c. of saline.

Further laboratory work: Urinalysis, 1-7 (Catheterized): Clear, acid, Sp. Gr. 1030; albumin faint trace, sugar xx. Acetone negative. Diabetic acid negative. Microscopic negative. Blood Sugar, 1-7: 128 mgms. per 100 c.c. Urinalysis, 1-8: clear, alkaline. Sp. Gr. 1030, albumin negative, sugar negative. Microscopic, occasional leukocyte. Blood sugar, 1-9: 98 mgms. per 100 c.c. Blood Wassermann and Kahn, 1-9: Negative.

The patient remained in coma until the morning of January 8. During this period nothing was administered by mouth except sips of water. Dehydration was avoided by normal saline intravenously. On the 8th he roused enough to take water and orange juice freely, though he remained very confused mentally. On January 9 he was entirely rational. He remained in the hospital until January 12, 1933, when he was discharged. At this time temperature and pulse were normal and physical examination entirely negative. The patient stated, however, that he had no recollection of taking the insulin nor of anything that had transpired for twenty-four hours before his entrance to the hospital.

J. A. came under the observation of the second of us (L. J. F.) after an interval of approximately seven and a half months, viz., on August 1, 1933. The consultation on this date was not arranged by the patient but by friends who had become alarmed at a persistent personality change. The patient was not aware of this and at first looked upon the whole situation as quite a joke.

From the neuropsychiatric standpoint it might be well to mention that the family history revealed nothing of note and the same was true of his previous medical history except what has already been

described, together with the fact that he had been troubled with a medium tremor of the hands since early life. The patient was unusually frank in answering any questions relative to his anamnesis. He was a college graduate and for a number of years the patient had been the representative of a large flour manufacturing company. He admitted frequent alcoholic bouts, but stated that they were usually precipitated by his inability to endure a constant self-consciousness and recurrent attacks of mental depression. Along with what he termed mental depression he stated that he had always been quite "morbid." When asked, "How do you feel about taking the insulin?" his answer was, "My pet ambition is to go to sleep and not awaken, and my pet regret is that I did not take the insulin in my room, so that they would not have found me until too late."

Following his discharge from the care of D. D. he enumerated his symptoms in the following manner: "I was blank mentally, constantly sleepy, and could not get a coherent thought in my head." The tremor of his face and upper extremities persisted for four or five days after his discharge from the hospital. The complaint of being mentally blank persisted for approximately two months. All of these symptoms gradually disappeared and he was not aware of any of them himself for two or three months previous to being seen by me on August 1st. Since the experience with insulin he had not had as keen a desire for alcohol and limited his alcoholic drinks to beer in moderation.

As mentioned before, he was conscious of no change in his personality except for general lack of interest. Although it may seem like a paradox, the results of his efforts in the business world were much more productive than previously. He had gained ten pounds since his discharge from the hospital and volunteered the information that he himself had no complaints of any kind. His associates, however, had noticed that since his experience with insulin he had been absent-minded, rude, acted very bored when on social engagements, and whereas formerly his behavior was quite conventional he now apparently, in the eyes of others, took a keen delight in violating all social tenets. It might be well to mention an incident which illustrates this point. He and some friends were invited to dinner at the home of a casual acquaintance. Upon entering the house the patient casually walked to the kitchen, helped himself to whatever was available, and when he was served at dinner immediately ate as rapidly as possible and in a manner contrary to all table etiquette. Formerly the patient was a spendthrift, whereas during the period immediately before being

seen by me he was extremely cautious about spending money and reproached himself for having spent what he did.

Examination on August 1, 1933, revealed nothing to indicate an organic disease of the nervous system other than a mild masked facies, a defective memory, a somewhat silly manner, and euphoria. He was placed on hyoscin, grains 1/200, three times a day per month. This was later raised to grains 1/150 and then to grains 1/100. After a month's observation the patient's friends reported that he was much improved, his behavior had materially changed, and he was more pleasant in every respect. After two months the patient himself admitted he felt much better in every way. On October 30 he reported that he felt well in every way after being without any form of medication for approximately a month. On the latter date the patient did not appear euphoric nor was there any evidence of a masked facies. His memory tested within the limits of normal.

The character changes, memory impairment, euphoria, and the slight masked facies are quite indicative of an encephalitis. The fact that there was apparent improvement with hyoscin furthers this conclusion. It is, however, difficult to state whether the toxic encephalitis was entirely due to the insulin or in part due to alcohol. From the acuteness of the onset, however, the major etiological factor appears to have been the insulin. We must not lose sight, however, of the possibility that we were dealing with a personality change in an individual having recurrent mental depressions and which were entirely independent of exogenous causes. The hyoscin was used merely in an effort to obtain relief for the patient from his symptoms. The fact that the patient was gradually returning to normal makes us draw the conclusion that there was no actual brain damage as a result of the toxic effects of the insulin.

Just how much of the clinical picture presented here was due to overdose of insulin (200 units) and how much to acute alcoholism is difficult to evaluate.

The fact that the blood sugar was only 125 mgms., and the urine sugar-free after 100 gms. of dextrose intravenously, would indicate a marked hypoglycemia before treatment was instituted. The convulsive seizures are explainable as being due to either alcoholism or hyperinsulinism. The prolonged coma even after the blood sugar had been normal for forty-eight hours was presumably an alcoholic effect.

Bibliography

1. Beardwood, Jos. T.: Jour. A. M. A., 102:765, (March

ACUTE LARYNGOTRACHEOBRONCHITIS*

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Laryngotracheobronchitis is a clinical entity which has been receiving an increasing amount of attention in the medical literature in recent years. While this has been most noticeable in the otolaryngological literature, there are a number of problems associated with the disease that bring it within the scope of the general practitioner. Most outstanding of these are the pulmonary complications which simulate pneumonia but which are not true pneumonia, except possibly in their terminal phases.

Laryngotracheobronchitis is an acute infection of the respiratory tract in which there is an intense inflammation of the mucus membrane of the

walls of the trachea and bronchi, accompanied by the formation of a sticky, gummy exudate. The exudate produces a mechanical obstruction to the airway which eventually leads to atelectasis or emphysema. Either type of obstruction is responsible, finally, for the high incidence of mortality which this disease carries.

Etiology.—Age is probably the most important etiological factor from the standpoint of the fatal complications. Since mechanical obstruction of a bronchus by sticky secretion is responsible for the fatalities, it is obvious that the plugging of the small major bronchi of infants will lead to extensive pulmonary involvement. Plugging of a bronchus of similar size in an older child or an adult, on the other hand, produces obstruction of only a limited area of lung, and consequently very little respiratory embarrassment; so that while the fulminating cases which become rapidly fatal are found most frequently in children under two years of age, a similar condition has been noted in adults where bronchial secretion associated with an upper respiratory infection causes an atelectasis simulating pneumonia. The clinical and bronchoscopic findings are similar to those seen in children, with the exception of the laryngeal obstruction.

The organism found in these cases has not been uniform either in our own series or in those reported by others. While the streptococcus hemolyticus is the most common single organism found, we have several cases in which only the staphylococcus, the

influenza bacillus, or one of the pneumococcus groups was present. In half the cases, the streptococcus was not found. In the majority of cases, however, there was mixed bacterial flora.

Pathology.—The correlation between the clinical, bronchoscopic, and gross and microscopic changes in laryngotracheobronchitis is exceptionally vivid. A thorough understanding of the pathology is essential in outlining therapy.

On postmortem examination the lungs show patchy, mottled areas of consolidation adjacent to areas of emphysema. On incising the lung, the lumen of each of the smaller bronchi is found completely occluded by the swelling of its mucosa. The larger bronchi and trachea, beside showing a marked thickening of the mucosa, are filled with viscid, glue-like exudate and crusts. Microscopically this exudate is composed chiefly of mucus, fibrin, polymorphonuclear leukocytes, and cellular debris. The airway through the larynx is obliterated by thickening immediately below the level of the cords where the loose connective tissue has become edematous.

The wall of the larynx, trachea and major bronchi show the significant changes which characterize this disease. The epithelium is necrotic, and is replaced to a large degree by a fibrinous exudate. There are many polymorphonuclear leukocytes scattered throughout this exudate as well as the submucosal layers. The mucus glands themselves are little damaged, and continue to function—probably pouring out an increased amount of mucus because of the irritation of the infection.

Thus we see an infection traveling along

*From the Bronchoscopic Clinics of Research and Educational Hospitals, Children's Memorial Hospital, and St. Luke's Hospital, Chicago, Illinois. Presented at the seventy-second annual meeting of the Michigan State Medical Society at Grand Rapids.

the laryngeal, tracheal, and broncheal walls, which apparently causes an increased glandular activity, at first serous and later mucous. As the infection progresses, a severe inflammatory reaction follows, which is characterized by edema, the invasion of the inflammatory cellular elements, and finally necrosis of the epithelium. It is this material, mixed with mucus and fibrin, which produces the obstructing crusts.

The mechanical action and effect of these crusts is seen in the microscopic examination of the pulmonary tissue. Beyond a plugged bronchiole, areas of atelectasis are found in the same section with areas in which the obstructive emphysema has been great enough to rupture the alveoli. Areas of pneumonia are scattered throughout, which, in most cases, were the fatal complication.

Symptoms.—The clinical picture of this disease is rather characteristic in its course, with a marked variation of symptoms depending upon the stage of the disease and upon the degree of pulmonary complications. The onset is usually acute and may follow any ordinary upper respiratory infection. It begins with a croupy, hoarse cough which rapidly increases to a direct inspiratory and expiratory stridor associated with dyspnea, restlessness, rise in temperature and pulse rate. With increasing laryngeal obstruction, the retractions at the suprasternal notch and the epigastrium become more marked. Cyanosis is a dangerously late symptom, but it usually precedes the final ashy gray pallor which indicates complete laryngeal obstruction and exhaustion.

Physical findings at the onset show a toxic child with an apparent pharyngitis, but associated with this are marked pulmonary symptoms and findings which differentiate this disease from acute laryngitis. While the stridor is very definite, being both inspiratory and expiratory, the cry is usually clear and not as coarse as it is in laryngeal diphtheria, because there is no actual membrane present. On auscultation one is impressed by the large quantity of mucous which must be present in the tracheobronchial tree as evidenced by the many coarse râles heard throughout. With an increase in the severity of symptoms, examination of the chest may reveal dullness and complete absence of the breath sounds

over an entire lung, associated with a marked shift of the heart toward the affected side. Following a vigorous cough, air may again enter this portion of the lung, but a great many râles and wheezes give evidence of a partial obstruction of the bronchus. With a re-aeration of the lung, there is again a shift of the heart toward its normal position. More frequently than not, however, the secretion, which is plugging a bronchus to give the obstructive symptoms, is not coughed out. It is at such times that operative intervention, either bronchoscopic aspiration or tracheotomy, becomes necessary. In those cases in which relief is not obtained, death may follow, due either to a superimposed bronchopneumonia or to cardiac failure.

Bronchoscopic Picture.—The pharynx usually shows little change except for a moderate degree of inflammation and the presence of a considerable amount of mucopurulent secretion. Occasionally, however, there is a marked supraglottic obstruction caused by a thickening of the epiglottis, aryepiglottic folds and false cords, but generally these structures, showing only mild changes, give no clue to the intense inflammatory process below the cords. The cords themselves are red and thickened, and have lost their rather sharp phonating edges. Dry, dirty, yellow plaques adhere to the cords, further obstructing the glottis.

Immediately below the cords is seen the principal obstruction to the airway. The soft subglottic tissues bulge from the phonating edges of the cords to meet in the midline, and the mucosa is deep red and velvety in appearance. Only a small chink posteriorly allows air to pass. If the anterior portions are not obstructed by the bulging subglottic tissue, obstruction is completed by dry yellow crusts or tenacious mucopurulent secretion.

There is an almost complete lack of motion of the larynx on respiration and phonation, due to the subglottic edema which has forced the cords into abduction, preventing adduction.

A small bronchoscope can be insinuated through the posterior chink after the obstructing exudate lying on the larynx has been aspirated, and it is immediately filled with secretion which has accumulated in the trachea. When this is aspirated with a strong suction pump, the tracheal mucosa

is found to be smooth, red, and velvety. All the spurs or divisions between bronchi are rounded, and the lumen of the bronchi markedly diminished in size.

At this stage, the secretion can be aspirated easily, and the airways can be adequately kept open by removing the mucopurulent material either through the bronchoscope or, if a tracheotomy has been done, with a catheter. The instillation of normal saline or a weak sodium bicarbonate solution aids in liquifying the secretions, facilitating the aspiration.

Occasionally this is not sufficient to relieve the obstruction. It may then be necessary to insert a bronchoscope either through the mouth or through the tracheotomy opening, in order to expose the obstructed bronchus and remove the crusts with forceps. We have done this in a number of cases after aspiration failed.

This bronchoscopic picture changes at a stage which is almost terminal, when the temperature rises steadily, the dyspnea increases, and the child gradually becomes more cyanotic or ashen gray. Physical findings indicate that air is entering both lungs, but the breath sounds have become distant or leathery. Both phases of respiration are markedly shortened. Aspiration is futile, and the relief formerly obtained does not occur, the child becoming even worse because of the effort of coughing. On examination of the trachea and bronchi in an attempt to relieve the obstruction, one sees a dry, glazed, gray surface which has entirely replaced the red mucous membrane. The lumina are clear of secretions, but the thickness of the grayish exudate itself causes obstruction of even the larger bronchi. The description of the microscopic pathology adequately explains this bronchoscopic picture.

Treatment. — There are two separate phases of treatment. The first is the problem of keeping the airway open, and the second consists of the general management of the patient in regard to feeding, fluids, etc. It is because these problems are so complicated and can change so rapidly that teamwork between the pediatrician, internes, residents, and bronchoscopist must be of the closest in order to reduce the high mortality.

The primary factor is to open the airway and keep it open sufficiently to permit respira-

tion. There is considerable discussion, however, as to which of the various methods should be employed. With the findings of a collapsed lung, bronchoscopic examination can be made both for diagnosis and to remove the plug of secretion which is occluding the bronchus leading to the affected lung. If, during bronchoscopy, the larynx and subglottic tissue are found to be so intensely inflamed and swollen that an artificial airway should be established, tracheotomy can be done with the bronchoscope in place. We feel that the use of an intubation tube in these cases is contraindicated because of the subglottic edema, the thick exudate which frequently clogs the intubation tube, and because of the fact that the presence of an intubation tube in an inflamed, edematous, non-diphtheritic larynx for a period of several days causes ulceration which leads ultimately to chronic laryngeal stenosis. A tracheotomy tube avoids injury to the larynx and permits adequate frequent aspiration of the thick obstructing secretions. The catheter can be directed through the tracheotomy tube into the portion of the lung which on physical examination is found to be atelectatic or obstructed. The constant attention of the interne or resident is demanded by the frequent obstruction of the tube. Because the secretions frequently become too tenacious to be removed by the catheter, it may be necessary to introduce a bronchoscope, as stated above, and remove the crusts with forceps. Nurses trained in watching tracheotomized patients must be present at all times, so that the child is never alone, because the small tube of a child can become plugged very easily. A "tracheotomy nurse" can avert a tragedy in such an emergency by merely cleaning the inner tube.

Following tracheotomy there is generally a period in which the child is definitely relieved of the distressing symptoms. He may sleep for hours because of the relief following the exhaustion from his fight for air. With the return of obstruction, however, restlessness recurs, and signs characteristic of collapse or obstructive emphysema can be noted. After several days it is found that aspiration becomes necessary at less frequent intervals, and the temperature subsides. Extubation is relatively simple if a low tracheotomy has been done. In the fatal cases, however, the obstruction be-

comes increasingly more marked, and generally a true pneumonia is superimposed on an area of atelectasis. While we feel that this may be accompanied by a septicemia, we rarely attempt a blood culture because of the added source of irritation to a child who requires complete rest.

The general management of the child consists in placing him in a warm room supersaturated with moisture. Oxygen should, of course, be used in an emergency, if respiratory obstruction is great enough to require operative intervention. Fluids by mouth or by vein are essential and are the best means of liquifying the bronchial secretions. But too diligent an effort to raise the fluid intake is to be avoided because the child is generally exhausted from his fight for air, and needs as much rest as possible.

The use of drugs is definitely contraindicated in these cases. If the child becomes restless, the restlessness is generally due to air hunger, and sedatives merely cover up this fact or decrease the respiratory effort which the child makes. Atropine is definitely contraindicated because the secretions, which are dry and sticky enough, are made even more tenacious by its use.

The question of using sulfanilamide usually presents itself in these cases. Favorable results have been reported if this drug is used early. The use of sulfanilamide, however, in an extremely dyspneic, cyanotic patient is seriously questioned. While recent work suggests the cyanosis found in some patients on sulphanilamide therapy is neither cyanosis nor sulphemoglobin, and that there is no reduction in the oxygen carrying capacity of the blood, the blue staining of the tissues masks the clinical condition of the patient to a dangerous degree.

Summary

1. Laryngotracheobronchitis is an acute infection of the lower respiratory tract which is characterized by a high fever, intense inflammation of the mucous membranes of the walls of the trachea and bronchi, and accompanied by the formation of a sticky, gummy exudate which may

partially or completely occlude the airways.

2. The onset is usually acute, with a "cold" which rapidly produces laryngeal symptoms of croupy, coarse cough though the voice remains clear, dyspnea, and pulmonary findings indicative of one or more of the types of bronchial obstruction.

3. The pathology consists of a diffuse acute cellular infiltration and destruction of the walls of the larynx, trachea and bronchi. The mucosal surfaces are coated by fibrin and purulent exudate which occludes the lumen of the bronchioles. There is a terminal bronchopneumonia, atelectasis and emphysema.

4. The bronchoscopic picture early is that of an intensely inflamed mucosa, the airway being obstructed by subglottic edema. In the later stages of the disease the mucosal surface is entirely replaced by a gray, necrotic lining. The lumen is obstructed by sticky secretion, and there is a thickening of all bronchial spurs with an obliteration of some of the bronchial orifices.

5. Treatment consists of providing a room with a 90 per cent water saturation without a high temperature. Atropine and sedatives are contra-indicated. With obstructive symptoms requiring operative intervention, bronchoscopic aspiration or tracheotomy are to be preferred to intubation.

6. Close coöperation and teamwork are required of the entire medical staff in an effort to decrease the high mortality which this disease carries.

Bibliography

1. Baum, H. L.: Some endoscopic observations on laryngotracheobronchitis. *Ann. Otol., Rhin., and Laryngol.*, 33:782-788, (Sept.) 1924.
Acute laryngotracheobronchitis. *Jour. A.M.A.*, 91:1047-1102, (Oct. 13) 1924.
2. Brennemann, Joseph; Clifton, Willie Mae; Frank, Albert, and Holinger, Paul H.: Acute laryngotracheobronchitis. (In press.)
3. Gittens, T. R.: Laryngitis and tracheobronchitis in children: Special reference to non-diphtheric infections. *Ann. Otol., Rhin., and Laryngol.*, 41:422-438, (June) 1932.
4. Guement, M. M.: L'Appareil lympho-ganglionnaire du larynx. *Rev. de Laryngol., Otol., et Rhin.*, No. 7, 55:828-861, (July-August) 1934.
5. Jackson, Chevalier, and Jackson, Chevalier L.: Acute laryngotracheobronchitis. *Jour. A.M.A.*, 107:929-932, (Sept. 19) 1936.
Acute laryngotracheobronchitis. *Bronchoscopy, Esophagoscopy and Gastroscopy*. Saunders, 1934, p. 311.
6. Richards, Lyman: Fulminating laryngotracheobronchitis. *Ann. Otol., Rhin. and Laryngol.*, 42:1014-1040, (Dec.) 1933.

ONE HUNDRED YEARS OF MEDICINE IN MICHIGAN

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Michigan was created a state January 26, 1837. Detroit had then a population of 2500 and the entire state had a population of 31,639. Pontiac had twenty log houses, Flint had four log cabins and Saginaw had two log cabins.

One hundred years ago Michigan was considered worthless as an agricultural state because it was a wilderness of swamps, lakes, sand and forest where the buzz of the mosquito at night furnished the music instead of the radio. The people had chills and fever and called it ague.

"Don't go to Michigan the land of ills.
The word means ague, fever and chills."

DeTocqueville, three years before Michigan received recognition as a state, traveled from Detroit to Pontiac, Flint, and Saginaw. He reports that when the pioneer families were sick the neighbors nursed them and often called in the Indians, who either killed or cured them as it pleased God. Later when more settlers came in, villages were established with the blacksmith, the carriage maker, the miller and the country doctor. Patients were bled. Ten grains of calomel was the usual dose and salivation with the loss of teeth was a common experience. The saddle bag of the doctor was the only drug store for miles. The doctor within a radius of ten miles ushered in the babies and closed the eyes of the dead. He was a power in the land and thought more of his patients than his fee. With tears in his eyes he refused cold water to his fevered patients and denied fresh air to cases with weak lungs.

Most of his remedies are unknown to the present generation. Laudanum was the best sedative in the saddle bag and prior to 1820 he only knew quinine in its original form as Cinchona or Jesuits bark which was administered in large doses so costly as to practically be denied to the masses. In the spring, the well took doses of sulphur and molasses to clear the blood. The efficiency of a drug was in direct proportion to its taste. The more bitter its taste the more potent the medicine, and no one had faith in small doses. Leeches and spanish flies (cantharides) reduced inflammation of the ear and lung. Another curious practice was the theory of signatures. If a plant had heart shaped leaves it had been designed by the creator for diseases of the heart. Liver wort, because it looked like

liver, had been intended for diseases of the liver, and celery, because it looked like a bundle of nerves, was to be used in nervous diseases. Peonies, because they were red, were to be used in anemia. With no thermometers, microscope, or hypodermic and no knowledge of vitamins and hormones the country doctor learned many things in the handling of sick people and with a very sick patient remained as nurse for two or three days during a crisis. Of course many of the drugs he used were without any curative effect whatever and it is only about seventy years ago that by experiment on animals and volunteers did the medical profession learn the actual result or therapeutic action of drugs.

As Dooley truly said "If the doctors had a little more Christianity and the Christian Scientists had a little more science, it doesn't make any difference provided the patient has a good nurse."

A hundred years ago medical knowledge could be summed up by saying that Vesalius had rewritten human anatomy, that Harvey had discovered that the blood circulates, that small-pox could be prevented by vaccination with cow-pox. Morgagni laid the ground work of pathology, comparing his findings after death with the symptoms during life. Laennec with the stethoscope and by the same method as Morgagni laid foundation of our knowledge of diseases of lungs and heart. Beaumont at Mackinaw Island, studied gastric digestion through a gun shot wound and found the stomach was not a grinding organ, but a chemical laboratory to digest food secreting hydrochloric acid plus some other substance which proved to be pepsin. In 1809 McDowell in the hills of Kentucky first did an abdominal operation by removing an Ovarian cyst, laying the foundation for surgery that later

under antiseptic surgery made possible operations on the brain, chest, spinal cord, and heart. It was the change from external surgery to surgery of internal organs. The doctor of one hundred years ago, however, had several valuable drugs still used today. Laudanum, quinine, mercury, iodides, arsenic, squills, iron, digitalis and ipecac, alkalies and acids. In 1860 morphine. The external surgery of that day consisted of amputations, excisions of tumors, removal of stones from the bladder, splints for fractures, opening abscesses and empyemas, trephining the skull for depressed fractures and operating to release strangulated hernia, and tracheotomy in croup or diphtheria.

The foundation of modern medicine has been laid: anatomy, physiology, post-mortem findings compared with symptoms during life and it found that disease was not due to the four humors of Hippocrates and Galen but that many diseases were different, affecting different organs and producing different symptoms, and as predicted by Sydenham, diseases were many and could be described and classified the same as the botanist does plants. This carried the idea that diseases were separate and require different treatment.

Modern medicine did not attain its full stride until well after the middle of last century. Instead of the fanciful speculations of authorities, scientists delved into researches for chemical, biological, and physical facts. Louis Pasteur, a chemist of France, after saving the beer, wine, and wool industry, turned his attention to human diseases. In studying beer and wine he saw under the microscope, minute forms of life. By many experiments he was able to distinguish the various forms of yeast and fungi necessary in making beer and wine and recognized also the forms causing deterioration.

After a vacation Pasteur injected an old culture of chicken cholera into chickens and found that it produced no effect whatever. Only a Pasteur could recognize the importance of this experiment. He injected new live culture and found he had immunized the chickens, while those not immunized died. This was the first time that an animal had been immunized against a disease. He also discovered the staphylococcus of boils and the streptococcus, the germ causing virulent blood poisoning.

Pasteur's work in 1857 was noticed by Joseph Lister, an Englishman, and he first applied, in a crude way, in 1867, antiseptics to compound fractures, using wax and carbolic acid. Later the carbolic spray was used over wounds as Lister thought the air conveyed the infections. Later antiseptics were used on the skin; all instruments, gauze and sponges were sterilized, a method which we now call the aseptic method. His important work can be appreciated when I tell you that it was but partially applied in the Franco-Prussian war and yet out of 13,000 amputations, 10,000 proved fatal.

The names of Lister and Pasteur are gloriously linked together forever. Huxley says that through the vaccination against anthrax alone in sheep, Pasteur saved France more than the entire cost of the Franco-Prussian war.

In 1847 ether was first used in the Massachusetts General Hospital. Long, down in Georgia, had also used it for general anesthesia. Later Simpson, in Great Britain, used chloroform and it is to the credit of Queen Victoria that she took chloroform at the birth of one of her sons in spite of the Biblical injunction, "In sorrow thou shalt bring forth children."

Simpson, when heckled, said God was more kind because when he operated on Adam to make Eve he put his patient into a deep sleep. It took many years before the importance of antiseptic surgery spread throughout the world. With anesthesia and the technic of antiseptic surgery all the cavities of the body are now open to operative procedures. The brain, lungs, heart, spinal cord and abdominal cavity are now in the hands of experts and are operated on for many diseases formerly considered incurable.

The most obvious results are in the modern successful treatment of fractures and in surgery for the crippled child. Plastic surgery will make you a new face if you don't like the one you have now. In 1867, Bobbs, in Indianapolis, removed a gallstone and in 1877, eleven years later, Marion Sims did the second gallstone operation. In 1882 Langsbuch removed a gall bladder with stones.

The year before, Billroth resected part of the stomach for cancer successfully.

Lawson Tait in 1883 did the first success-

ful operation for ruptured tubal pregnancy.

In 1880 Sir Henry Morris removed a stone from the kidney.

In 1886 Treves and Grant first removed the appendix and soon surgical journals were filled with new surgical procedures for many diseases.

In 1893 Behring first used diphtheria antitoxin and many cities today are entirely free of this disease because children have been immunized against the disease.

Many young doctors have never seen a case of typhoid fever because pure water and injection of bacterins in the army or in threatened epidemics has almost entirely eliminated this disease. Two of the most outstanding recent discoveries have been the use of Insulin in diabetes and the use of liver and iron in pernicious anemia. The first due to discovery by Banting and the latter by Murphy and Minot. In the last sixty years more progress has been made than in all previous history of the world.

I have mentioned only a few great discoveries out of several hundred and shall limit the rest of my time to the contributions made by medical profession of Michigan.

I have already called attention to the work done by Beaumont at Mackinaw Island in 1825, the study of digestion in his patient with gunshot wound of the stomach. Henry Sewall, professor of physiology, immunized pigeons against rattle snake bites so that ten times the minimum lethal dose could be injected into the pigeon with impunity. The similarity of symptoms due to the venom of snake bite and diphtheric toxin led Behring and Roux independently to immunize horses against the toxin of diphtheria. The horse manufactures the antitoxin which is used to cure and prevent diphtheria. I know many families entirely wiped out by diphtheria before the use of antitoxin.

A few years ago the Michigan State Medical Society recommended to the salt manufacturers that the iodine be left in ordinary table salt which has resulted in a tremendous decrease of goiter in Michigan.

Dr. August W. Crane of Kalamazoo who died this year was a pioneer in x-ray work and two years after Roentgen an-

nounced his work, Dr. Crane made his own machine and was first to show its use in diagnosis of cancer of the stomach. John Abel, a former professor in Michigan, later removed to Johns Hopkins where he synthetically produced adrenalin, a boon to the asthmatic cases and to those with low blood pressure. Macewer in Glasgow, first removed an entire lung for tuberculosis. Saurbuck, of Germany, did many operations for tuberculosis of the lungs and today Michigan leads the world in the surgical treatment of pulmonary tuberculosis. Victor Vaughan has been called the father of preventive medicine and during the Spanish-American war, where one in five soldiers had typhoid fever, showed that flies were the carriers of the disease.

Dr. J. Henry Garstens, Detroit, first removed an appendix in Michigan. Dr. Theodore McGraw did the first removal of the entire thyroid gland. In 1878, Dr. William Fuller, in Grand Rapids, removed the right lobe of the thyroid gland. Dr. H. O. Walker did the first Bassini operation for hernia, the first gallstone and the first to use the Murphy button for intestinal union in a human being, and was the first to apply antiseptic surgery, and he crushed more stones in the bladder than anyone up to the time of his death. In Flint, we believe we were first to use glucose intravenously in traumatic shock. Dr. Donald McLean was the first to remove the shoulder blade for sarcoma. Collier and Newburgh studies on water balance following operation and the Simpson institute's discovery of ventriculin for pernicious anemia, are the latest great contributions to medicine.

According to Gay there are 1,682 separate diseases: 47.7 per cent due to bacteria, parasites, viruses; 17.3 per cent due to physical or chemical deficiencies; 35 per cent due to unknown agents such as heredity, tumors, nervous diseases and blood diseases.

Not all diseases have been conquered but a beginning has been made, and Michigan has played a glorious part. Perhaps in another hundred years, they will be surprised at our ignorance. "But we only begin to fight."

THE JOURNAL

OF THE

Michigan State Medical Society

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DECEMBER, 1937

*"Every man owes some of his time to the up-
 building of the profession to which he belongs."*

—THEODORE ROOSEVELT.

EDITORIAL

MICHIGAN TUBERCULOSIS ASSOCIATION

THE thirtieth anniversary of the founding of the Michigan Tuberculosis Association was observed in Detroit in October. Through the courtesy of Mr. Theodore T. Werle, Executive Secretary of the Michigan Tuberculosis Association, we are privileged to publish elsewhere in this number of THE JOURNAL an historical account of the movement. Many of those who were instrumental in the early organization in the movement to combat tuberculosis have died, but the Association is a living monument to their efforts. Mr. Werle has gone into the subject in detail and his account will be read with interest.

Great advances have been made in both diagnosis and treatment. Older citizens

of the state, whether doctors or laymen, remember the time when very little in the way of accurate knowledge existed. Death loved its shining mark, and young people in adolescence and early manhood and womanhood "went into decline" and almost painlessly faded out of the picture. The treatment was to keep them housed in warm quarters with little or no fresh air, and as a result, as many now in their sixth or seventh decade can remember, whole families were wiped out in the course of a very few years. This has been all changed with the discovery of the infectious nature of the disease. Robert Koch's famous discovery of the tubercle bacillus was in 1882. Then came the fresh air treatment, in which patients were given all the fresh air imaginable, sleeping in open porches, with medication to control the cough. This saved a great many lives, but it was only a step in the direction of prevention and cure.

Then came early apprehension of the disease. A large number of suspects were given tuberculin or skin tests, and later positive reactors were checked over by means of x-ray examinations. Naturally, many cases examined were found negative. Better, however, is this method if its application were made universal, even though the great majority of cases were found negative, than even one positive case of infection should be overlooked. Probably there is no other office procedure that justifies itself to a greater degree than such a routine examination of chests, where the patient's history or symptoms indicate possible pulmonary pathology. In all positive reactors to the tuberculin test, an x-ray search should be made for any possible minimal lesion. There is always a beginning, and sometimes the beginning is infinitesimally small. In such cases, a second x-ray examination should be called for at a later date before the patient is dismissed as safe to himself as well as to those with whom he is in contact.

The treatment of tuberculosis has become almost universally recognized as an institutional function. This may be a public (that is, civic) sanitarium or a private sanitarium. No physician should undertake these cases unless and until he is thoroughly equipped to handle them. The principle of rest, the greatest factor in the treatment of disease,

must be carried beyond the stage of bed rest. It must be directed towards rest of the organ actually affected, which means putting the individual lung at rest by surgical means which ranges from simple crushing of the phrenic nerve to the major operation of thoracoplasty. Many physicians who discover active tuberculosis immediately relinquish any attempt to treat the patients but hand them over where they can procure expert therapy.

It is needless to say that there has been a markedly statistical decline in the number of tuberculosis cases in proportion to the population since the Michigan Tuberculosis Association has begun its active work. As Dr. Kendall Emerson one time remarked, "There is no serum that has done so much for the public health as printer's ink." There is a great deal of truth in this statement. Healthy publicity has created healthy public opinion, without which very little may be accomplished in the way of preventive medicine.

THE MINIMAL TUBERCULOSIS LESION

IN THE book review section of this JOURNAL, we have presented an all too inadequate review of Dr. Alexander's new work on "The Collapse Therapy of Pulmonary Tuberculosis." No space that any journal could afford would do absolute justice to this work. It is encyclopedic almost in its inclusiveness of all that pertains to the subject of surgical treatment of tuberculosis. There is one point, however, that requires stressing at the present time, and that is searching out the so-called minimal lesion. This is, of course, the function of the physician and roentgenologist. Having apprehended the so-called minimal tuberculosis lesion, what next? We shall assume the reviewer's prerogative to quote the following paragraphs from Dr. Alexander's excellent book. These paragraphs express in a nutshell the procedure which should follow the apprehension of the so-called minimal lesion.

"This classification does not include the presence of a cavity, which forms the most important indication for pneumothorax. The classification includes anything from the smallest roentgenologically demonstrable lesion up to any amount of infiltration that can be contained in the lung above the second anterior rib. Whether or not pneumothorax is in-

dicated for a minimal lesion depends upon the extent to which the lesion has developed, the rapidity of its development, the symptoms accompanying it, the presence or absence of many tubercle bacilli in the sputum, upon what condition of life immediately preceded the diagnosis, and upon the results of any previous treatment.

"Minimal tuberculosis is usually amenable to simpler measures. In a few patients bed rest fails to control the lesion, and in these paralysis of the diaphragm is sufficient for the great majority. There are, however, a very few remaining cases which are progressive from the first observation and continue so in spite of both bed rest and phrenic paralysis; in these very few, pneumothorax is not only justifiable but mandatory. It is a mistake to assume that because a lesion is small its progression will be slow. Often no more than a month or two are required to determine that bed rest is a failure, that the added paralysis of the diaphragm has also failed, and that pneumothorax is required.

"The substitution of immediate ambulatory pneumothorax for all bed rest treatment in minimal lesions, while it is less unjustifiable than in more advanced lesions, may temporarily control the local pulmonary lesion, but it neglects the general infection which has long since penetrated beyond the initial lesion. This practice is one of the compromises with ideal treatment that may be dictated by economic necessity, but should be condoned for no other reason."

MEDICAL SOCIETY MEMBERSHIP

FROM time to time, we have endeavored to impress the importance of membership in the county medical society. We realize, however, that anything written in these columns can be read only by the elect, so to speak, and that those we would reach are beyond the pale of the state medical JOURNAL. For obvious reasons, the JOURNAL is not read by them. It has become almost a truism that the physician is an individualist. Some carry this so far that they fail to mix with their professional confreres at all. It is a sociological fact that the individual can exist only as a member of a group. There is no such thing as rights which have not been secured for the individual by the group. This is true not only in the medical profession, but among mankind in the broadest sense. As Kipling has very tersely put it—

As the creeper that girdles the tree trunk,
the law runneth forward and back.
The strength of the pack is the wolf, and
the strength of the wolf is the pack.

In other words, in membership in a medical society only can one's individualism assert itself.

Membership in the medical society is an advantage not only to the member, but to

the society. A characteristic of professional association is that the main object is to improve the intellectual equipment of its members so that they may thereby render greater service to their patients or clients as the case may be. The economic phase, while no one will deny its importance, is always held in abeyance and is seldom discussed. The feeling is that the economic benefits will grow out of greater and higher qualities of service.

DR. GEORGE KAMPERMAN HONORED

AT the last medical convocation of the University of Michigan, the honorary degree of Master of Science was conferred on Dr. George Kamperman of Detroit. The choice of candidate was a happy one, and Dr. Kamperman is to be congratulated on this well-deserved honor. He has achieved a high place not only in the medical profession of the United States, but is looked upon as a leader in his specialty of Obstetrics and Gynecology.

After graduating from the Zeeland, Michigan, high school in 1897, Dr. Kamperman began active life as a school teacher. There is probably no better preparation for professional life than a few years spent in teaching school. Following this experience, he entered the Ferris Institution for his college preparatory training after which he entered the Medical School of the University of Michigan, graduating with the degree of M.D. in 1907. The following five years were spent as assistant instructor in Obstetrics and Gynecology under his chief, Dr. Reuben Peterson. Then followed a year in attendance at the clinics of Vienna. Dr. Kamperman has been practicing his specialty in Detroit since 1913. He is a fellow of the American College of Surgeons, Chief of the Department of Obstetrics and Gynecology, Harper Hospital, Detroit, and since 1932, chief of the staff of Harper Hospital as well as professor of Gynecology at the Medical Department of Wayne University.

The recipient of an honorary degree, in accordance with custom at the University of Michigan for a number of years past, has given an address on the subject of his specialty or some other subject of great importance to the profession as a whole, before the faculty and medical students of the

university. We are privileged to present, in this number of *THE JOURNAL*, Dr. Kamperman's address on the occasion of the awarding of the honorary degree. This interesting paper should appeal to all members of the profession irrespective of their practice.

STATE MEDICINE

DR. R. W. MCGREGOR, Flint

State Medicine, Insurance Medicine, Socialized Medicine are slightly different terms but they have the same fundamental meaning. It means that the state supervises and dictates the practice of medicine. The foreign countries have some form of state control of medicine. The reason for the adoption of this form of practice of medicine was apparently an economic one. Especially after the World War, it was thought necessary to decrease the cost of medical services to the individual. Therefore, a form of insurance medicine under state supervision was inaugurated in practically all countries. In theory, this form of practice of medicine perhaps sounds ideal but it does not work out practically for the best interests of the patient and especially the doctor.

Under the system a patient is assigned to a certain doctor and there is no other choice unless the patient is financially able to pay for the services of another doctor. It is plain then to be seen that the vast majority of patients only see the doctor assigned to them. It is only natural that there should be a lessening of personal interest of the doctor toward his patients. The stimulation of competition is gone. The doctor does not look to his patient for his fee so he does not have to please the patient and there is a loss of personal interest that we consider so essential in treating a case. There also is a lack of necessity to study and become more proficient.

Another grave point for consideration is the fact that any form of state medicine becomes a political football. The politicians eagerly grab this chance and promise the voters cheaper medicine if elected. Also, once state supervision of medicine has been adopted, the politicians see to it that it remains, for it provides many good jobs for them and their friends. Naturally the cost of these offices and jobs is paid indirectly by the patient.

I heard a couple of talks on state medicine by general practitioners while in Vienna. They remarked before the war that a general doctor could make enough in 17 to 20 years to retire. Now it is a starvation proposition. A doctor is allowed fifty cents for an office call. They warned that the time to stop this system was before it was adopted because it is almost impossible to change it after once it has been adopted. It is particularly severe on young doctors and general practitioners. The professors get patients with money who can afford their services and fees. A good example of the fees allowed under the system is that Professor Finster is allowed ten dollars for a gastrectomy.

Therefore state medicine in Vienna is held in high disrepute by the medical profession and many thinking people, but the majority consider it a cheap form of medicine, apparently not caring that they get cheap service.

Professor Sir John Fraser of the Royal Infirmary of Edinburgh is drastically against state medicine in any form. He says it is a drawback and a blot

on the Medical Profession in England. He asked me if our present administration at Washington wasn't in favor of state medicine. I told him I was sure it was, but so far through our many county, state and national medical societies, we were staving it off. He thought that was fine, for once it got a good hold on a country it was almost impossible to change. He said the worst aspect of the whole thing was that politicians were actually directing the practice of medicine. In other words, medical practice becomes a political football. He subscribed readily to the foregoing reasons why state medicine is not practical for the best interests of the patient and doctor, and hoped we in this country would never adopt it.—From the *Genesee County Medical Bulletin*.

The peasants of Styria, a mountainous Austrian province, indulge in the strange practice of arsenic eating. Styrian spring waters and the soil itself are purposely ingested in quantities which are said to contain as much as eight grains of the drug, and such doses are often taken several times each week. One who is acquainted with the action of arsenic would expect severe poisoning to result, but, on the contrary, the arsenic eaters apparently derive a tonic effect.

The physician who prescribes arsenic cannot be so oblivious to its toxicity, but fortunately the drug, in certain newer compounds, may be administered with little danger of intolerance. Carbarsone, Lilly, is such a preparation which during its broad acceptance as an amebicide has been unusually free of toxic properties.

AULD SANTA CLAUS

Oh! I wonder, and I wonder, aftimes sae verra hard—

When I read the verse that's printed on my nee-
bor's Christmas card—

If I am working as I ought to, in this grand and
kindly cause

Of spreading joy and comfort, like our guid auld
Santa Claus.

He's the kind o' man to lead us in the work we a'
should do,

He's the essence o' the sunshine we should a' be
scattering noo.

He's the emblem o' the guidness in the herts o' a'
mankind

And he's, too, oor brither's keeper when it comes to
Christmas time.

Oh, I'm mindful o' his coming,—tae oor stockings
'roon the lum

In the yesteryears o' friendship,—with the candy,
fruit, and gum,

And I want tae live and help him as he sings his
Christmas cheer,

As he clothes and feeds the helpless and the little
ones sae dear.

Am I gien o' my substance as the Lord wid like
me to,

Am I doing my share o' kindness, as oor Christmas
comes in view,

Am I doing the best that's in me, ere the evening
hours pause—

Then, my freens will stop tae love me, as they
do auld Santa Claus.

WEELUM.

DEVELOPMENTS IN OUR STATE PROGRAM FOR SYPHILIS CONTROL

Advisory Committee on Syphilis Control

LOREN W. SHAFFER, *Chairman*

THE program of syphilis control for the State of Michigan is developing rapidly. Lack of further funds is the chief restraining influence to the unfolding of a really progressive program. Our last announcement through this JOURNAL covered the outline of such a program, stating the principles that we believed should govern it. The present announcement covers progress achieved.

An appropriation of \$50,000 was passed by our last State Legislature for syphilis control. Twenty-five thousand dollars of this amount is to be used for laboratory expense incident to the Prenuptial Physical Examination Law. Twenty thousand dollars has been set aside to cover the anticipated cost of supplying free drugs for indigent patients or those unable to pay ordinary fees. New regulations for the control of venereal diseases have been approved by the Council of the Michigan Department of Health. New report forms for venereal disease will probably be in circulation by January 1, 1938. Likewise, the rules and requisition blanks for the distribution of free drugs will soon be in your hands.

Drugs Supplied

The following drugs will be available for the treatment of syphilis: neoarsphenamine in 0.45 gm. and 0.6 gm. ampules, mapharsen in .04 gm. and .06 gm. ampules, and bismuth subsalicylate in 12 c.c. vials. A maximum of 8 tubes of arsenical and one vial of bismuth will be supplied per order per patient. Reorders will be honored for these patients as needed. Counties and cities having full time local health departments will be supplied direct for that source; all others will order from the State Health Department in Lansing and receive same by mail. The only restriction on the use of these drugs will be that the physician must certify that the patient has been reported and that he is unable to pay fees sufficient to include the cost of drugs.

The outstanding changes in the regulations for the control of venereal disease are that all cases of syphilis, gonorrhea and chancroid, in any form or stage, shall be reported immediately, and that the patient may be reported by name, initials or case number. The date of birth instead of age must, however, be given. Other desirable features include a special form to report by name patients lapsing treatment, for reporting special cases of infectious syphilis, also for reporting gonorrhea in nurse maids employed in homes where small children are present, and, finally, for requesting aid in source and contact control.

Report Forms

The new report forms will contain two report blanks on one sheet with perforation for separating. Form No. 1 will contain space for the patient's name, initials or case number; sex, birth date, residence; name stage or form of the disease, and the method of diagnosis. The block system for checking the desired information is to be used as far as possible to simplify reporting. It is planned that franked and addressed envelopes will be supplied with these forms. Our committee on syphilis control advised that the State Health Department supply these forms to all registered laboratories and request them to include the form with each positive

laboratory report for a diagnostic or prenatal case.

Outline Instructions Available

The control committee has been considering the advisability of preparing acceptable outlines of treatment for the various clinical types and stages of syphilis. A difficult problem was how to have this information available to every physician in the State of Michigan and at a time when such guidance might be desired. Publication in the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY and mailing reprints would not be enough. Fortunately, the Michigan Department of Health has approved the idea of such outlines; has agreed to publish them in pamphlet form and include them, as requested, with each order for free drugs. The requisition blank for drugs will contain a list of the outlines of treatment available, followed by a space to check, if outlines are desired supplied with the order. The following outlines published herein have been approved by the Committee on Syphilis Control of the Michigan State Medical Society and will be supplied:

- Treatment of Early Syphilis.
- Treatment of Late Syphilis.
- Treatment of Neurosyphilis.
- Treatment of Cardio-vascular Syphilis.
- Treatment of Hepatic Syphilis.
- Treatment of Syphilis in Pregnancy.
- Treatment of Congenital Syphilis.

An outline of reactions and complications to treatment, with their prevention and management, will also accompany these instructions. The outlines specify that they are not to be followed blindly in the presence of complications or contra-indications. It is expected that the physician will use such indicated judgment. Also that the outlines apply only to the form or stage of the disease that they specify. It is important that the physician be able to properly classify cases as early or late, and that he examine for and recognize at least frank cardiovascular and hepatic syphilis, as well as utilize the spinal fluid examination for the recognition of neurosyphilis. These outlines would be acceptable to the majority of our leading syphilologists. At least the principles specified should be applied. We have no quarrel with the individualist who desires to give courses of different length, or other minor variation, provided the total amount of treatment in a unit of time is in agreement. It must be remembered that these outlines are prepared for the drugs supplied. While we believe that effective treatment can be carried out with them alone in the great majority of cases (with the reservations mentioned, particularly in neurosyphilis and congenital syphilis), we realize that other preparations are often desirable, but the drugs in such cases must be supplied personally by the physician. Finally, it should not be implied that we are endorsing the particular pharmaceutical house supplying the drug that you receive.

Treatment of EARLY Syphilis

All cases of syphilis of less than five years' duration are arbitrarily included in this group. This is the infectious stage of the disease. It usually occurs in young adults, *not* inclined to take their condition seriously, at least after visible signs disappear, but who offer the best opportunity for cure if sufficient treatment can be administered. If syphilis is to be controlled, this group must be found and held to sufficient treatment to, at least, control in-

fectiousness. Your patient must be sold on a minimum of twelve to eighteen months treatment at the start and constantly reminded that this must be his goal. If necessary, threaten to report him, and if he still fails to cooperate carry out your threat.

No standardized plan of treatment can be followed in the presence of contraindicating complications. With this reservation in mind, the following plan can usually be carried out as acceptable routine treatment for *early* syphilis, in young otherwise healthy patients.

Start as soon as the diagnosis is made (never on suspicion, always confirm with laboratory findings) on arsenicals. The first dose should be one-half the standard dose; the second, three-fourths; and the third, the full dose. Although weight should always be considered, it is commonly accepted practice to advise 0.45 gm. of neo-arsphenamine as the standard dose in women and 0.6 gm. in men. With mapharsen equivalent, dosage is .04 gm. in women and .06 gm. in men.

If neo-arsphenamine is used, it is suggested that you give 0.3 gm. the first day, 0.45 gm. the third day, and 0.6 gm. the seventh day in men; 0.2 gm. the first day, 0.3 gm. the third day, and 0.45 gm. the seventh day in women. Continue with five more injections of the standard dose, at weekly intervals, until a total of eight injections are given. If mapharsen is selected, it is suggested that it be given twice weekly for four weeks (eight injections), giving similarly one-half the standard dose for the first injection, three-fourths for the second, and then six more of standard dosage twice weekly.

This first course of neo-arsphenamine of mapharsen is to be followed immediately by four intramuscular injections of bismuth salicylate, 1 c.c. to the injection, at weekly intervals. Continuous treatment at weekly intervals without rest periods should then be employed, giving alternating courses of arsenical and bismuth in standard dosage with eight injections of each to the course, until four complete courses of bismuth and arsenical are given. This is the accepted minimum standard for Wassermann negative primary cases. Wassermann positive early cases should be kept continuously on treatment until five such courses (40 arsenical, 40 bismuth) are administered.

A weakness of physicians, and particularly patients, is to depend too much on the Wassermann test. We prefer it to be negative for a year before treatment is discontinued. Such tests may well be taken at the start of each arsphenamine course. When active treatment is stopped, advise Wassermann or Kahn tests at six month intervals for two years and yearly intervals thereafter for at least five years.

Spinal fluid examination is absolutely essential to the proper management of these cases. It should be made at the end of the first course of arsenical treatment and repeated if negative at the end of treatment. At least insist on a spinal fluid examination before dismissing any case as probably cured. If positive at the time of the first examination at the end of the first course of arsenical, continue routine treatment but re-check in three to six months. If satisfactory improvement has not occurred, consider special treatment indicated for neurosyphilis, or, better, call consultation.

After treatment is completed, the patient should have a complete physical examination, at yearly intervals, in addition to the serologic checks on the blood serum. Special attention should be given to the cardiovascular system with particular reference to the aorta. It is advisable to have an x-ray of the cardiovascular stripe even in the presence of negative physical findings, say at the end of five years.

Treatment of Late Syphilis

(Other than Cardiovascular or Hepatic)

Late syphilis includes all clinical varieties of more than five years' duration. Those cases that are asymptomatic or without clinical evidence of the disease are spoken of as latent. Late symptomatic cases include cutaneous, osseous, visceral, cardiovascular, hepatic, neurosyphilis, etc. All types of late syphilis except those showing signs of cardiovascular or hepatic syphilis may be started on this system of treatment. Consultation should be requested, however, if there are clinical or spinal fluid findings of neurosyphilis or questionable complications.

In late syphilis the possibility of a Herxheimer reaction should be kept in mind and such patients prepared by starting their treatment on bismuth and the iodides rather than arsphenamine. A modified continuous method of treatment is outlined.

Week	Treatment
1- 4	Bismuth 1 c.c. intramuscularly at weekly intervals and potassium iodide 10 to 30 gr., T.i.d., p.c. by mouth.
5- 12	Eight weekly doses Neo. 0.45-0.6 gm. or mapharsen, .04-.06 gm. (first dose, one-half full dose).
13- 22	Eight weekly doses bismuth and iodides, as before.
23- 30	Eight weekly doses neo-arsphenamine or mapharsen.
31- 40	Ten weekly doses bismuth and iodides.
41- 48	Eight weekly doses neo-arsphenamine or mapharsen.
49- 60	Twelve weekly doses bismuth and iodides.
61- 72	Rest period.
73- 84	Twelve weekly doses of bismuth and iodides.
85- 96	Rest period.
97-108	Twelve weekly doses bismuth and iodides.

A spinal fluid examination should be made preferably at the end of the first course of arsphenamine. (Spinal fluid examination should not be done routinely in elderly patients—60 or over—unless urgently indicated.) If positive, the principles outlined for neurosyphilis apply. If negative, continue as outlined and the test need not be repeated.

This provides for a little over a year of continuous treatment together with an additional year of intermittent treatment, during which a minimum of 24 doses of neo-arsphenamine or mapharsen and 58 doses of bismuth are given. Rest periods are not forbidden but are limited to the latter half of treatment. This amount of treatment should be given regardless of serologic progress.

On completion of treatment, the patient should be followed with periodic physical and laboratory examinations at yearly or bi-yearly intervals for the remainder of his life.

The application of this treatment method to latent syphilis is materially influenced by the patient's age and probable life expectancy. If the patient has passed the age of sexual activity so that he no longer exposes others to infection, and if his probable life expectancy is only ten to fifteen years, the risks of treatment may well be greater than the risks of syphilis. It is, of course, not possible to set an age limit past which treatment should not be given or its intensity lessened; each patient presents an individual problem to be solved only after consideration of his physical and social status.

Congenital Syphilis

Congenital syphilis, like acquired, can well be divided into early and late forms. Four years can be used as a dividing line between early and late cases. Few children have outspoken signs of con-

genital syphilis before the third week, although eruptive lesions are common in stillborn infants. The main clinical findings in the infantile type are: skin eruptions, snuffles, hacking about lips, enlarged spleen with pot belly, and weakened old man appearance. A positive cord Wassermann is not diagnostic of syphilis in the infant. It must be confirmed by clinical findings or the blood Wassermann on the child taken preferably after six to twelve weeks.

The treatment of early or infantile congenital syphilis differs only from acquired syphilis in the dosage and modes of administration of the drugs used. Arsenicals are our most effective drugs. The dosage of neo-arsphenamine or sulpharsphenamine (not supplied) is roughly one decigram per 25 pounds body weight. The indicated dose of mapharsen is one-tenth of this amount. In babies under one year of age, or in whom veins are not available for intravenous injection, neo-arsphenamine or sulpharsphenamine are to be given in proper dosage by intramuscular injection. In giving arsenicals by intramuscular injection, the calculated dosage should be given dissolved in 1 to 2 c.c. distilled water, instead of the usual 10 c.c. for intravenous use. It should be given into the center of gluteus maximus muscle in upper outer quadrant, as for other intramuscular injections. Special drugs, such as sulpharsphenamine, are not supplied. For the same reason, the use of stovarsol is not discussed. Mapharsen or neo-arsphenamine is to be given intravenously, as soon as suitable veins are available. Mercury or bismuth is to be given as interval treatment between courses of arsenicals. Mercury in the form of rubs (this form is not supplied by the State Board of Health) is advantageous to use on small infants receiving arsenicals by intramuscular injection. Use 33⅓ per cent unguentum hydrargicum (blue ointment) in dosage of approximately one gram per 25 lbs. body weight applied six nights weekly to a different area each night. When available veins permit intravenous arsenicals, change to bismuth by intramuscular injection, using ⅓ gr. bismuth salicylate for each 25 pounds body weight. For infants on the breast, potassium iodide should be given to the mother. Continuous alternating courses of arsenicals and heavy metals should be given as outlined for late syphilis. Unless some special indication arises, spinal fluid examinations are not to be ordered in children under four years of age.

In late or tardive congenital syphilis, the schedule outlined for late syphilis applies with suitable dosage of drugs used according to weight. The spinal fluid examination should be ordered following the first course of arsphenamine, and the treatment outlined for neurosyphilis applied to positive cases. Wassermann-fastness, it must be remembered, is common in congenital cases. Their treatment is not to be continued indefinitely in the absence of clinical signs of activity simply to reverse the blood serology.

Treatment of Syphilis During Pregnancy

The treatment of syphilis in the pregnant mother is the field in which we can do our most effective work in public health and preventive medicine, as a part of the national campaign for the control of syphilis. The ideal treatment for the congenital or pre-natal child with syphilis is that given to the mother before delivery. This is the highest and most successful type of syphilis control. The Wassermann test must be a part of the routine examination of the mother at the time of the first visit.

The earlier in pregnancy the presence of syphilis is discovered and treatment begun, the better the

chances for delivery at term of a normal baby. The test should be repeated, when negative, at the seventh or eighth month. Every woman who has had a history of syphilis should receive some treatment during each pregnancy, regardless of her serological findings.

Treatment is usually well tolerated during pregnancy. Reliance should be placed on alternating courses of arsenicals and bismuth. The latter is better tolerated than mercury. The intensity of treatment will depend upon the patient's general condition with special reference to kidneys and blood pressure (in the presence of nephritis, the arsenicals are better tolerated than bismuth); upon the time in pregnancy the syphilis was first discovered, and the stage of syphilis, its acuteness, and the amount of previous treatment. If discovered in late pregnancy, arsenicals should be relied upon. They may be reinforced by two mercury rubs, applied in the accepted manner, and dosage to the abdomen twice weekly. The acute early case also needs arsenicals with the intensity of treatment pushed to the limit of safety. In general, the course should be planned so that the patient receives a course of arsenicals preceding delivery. The standard course as outlined for the treatment of late syphilis may be used, employing continuous alternating courses of either mapharsen or neoarsphenamine and bismuth with the previous stated reservations in mind. The maximum dose of neoarsphenamine is to be 0.45 gm., or mapharsen, .03 to .04 gm. Bismuth salicylate will be used intramuscularly in maximum dosage of two grains (1 c.c.) at weekly intervals for interim treatment, if no evidence of hypertension or nephritis exists. If the latter are present, depending upon the degree, straight rest intervals or a soluble bismuth salt in fractional doses may be employed.

Early recognition of the presence of syphilis and at least some treatment with active syphilitic drugs is our goal.

Hepatic Syphilis

Arsenicals in any form are not to be used in hepatic syphilis. Treatment must rely on the use of mercury, bismuth, and the iodides. The therapeutic paradox of too rapid healing, causing the patient to become clinically much worse, interdicts the use of rapid healing drugs, such as arsenicals. After six months, in mild cases, arsphenamine may be considered, if approved, after consultation.

Treatment of Neurosyphilis

Asymptomatic neurosyphilis (no symptoms, except positive cerebro-spinal fluid findings) may occur in both early and late cases. Such asymptomatic cases, as well as symptomatic early cases (dizziness, headache, cranial nerve palsies, etc.), often respond surprisingly well to routine treatment, as outlined for early or late syphilis. This is especially true if they are of the meningeal type, as evidenced by a high cell count in the cerebrospinal fluid. The possible infectious nature, as well as syphilitic involvement of other organs and tissues, makes routine treatment indicated. They should not, however, be continued indefinitely on such treatment. The spinal fluid should be rechecked in six months and decision made on a basis of the serological and clinical response. Likewise active cases discovered by routine spinal fluid examination after prolonged previous routine treatment are candidates for a change of treatment. This is especially true if the cases present spinal fluid findings approaching the parietic formula.

The treatment of resistant cases of neurosyphilis is a very complicated matter that cannot be covered in the scope of this outline. Where at all possible,

consultation should be requested for such cases. In addition to changes in intensity and different forms of arsenicals and heavy metals, plus the use of sodium iodide, the newer special forms of treatment apply. Where the case can be hospitalized readily, fever therapy should be considered at once. If there are any clinical suggestions of paresis, fever therapy is urgently indicated. Malaria is still first choice of most institutions, although other forms of fever therapy are valuable. In an ambulatory practice, such resistant cases of neurosyphilis, in whom fever therapy is not urgently indicated, may be placed on tryparsamide therapy, provided eye complications are not a contraindication. Since this drug (tryparsamide) is not supplied by the State Department of Health, it is suggested that you refer to standard reference texts, if contemplating its use, for detailed guidance.

Cardiovascular Syphilis

Treatment indicated depends upon the certainty of etiological diagnosis and the relative severity of the cardiovascular involvement. Positive serology in the presence of cardiovascular disease is not necessarily indicative of cardiovascular syphilis. In advanced cases specific treatment is of little value and even hazardous if not used with extreme caution. Rest in bed, plus the usual medical treatment, is the main indication with the use, according to tolerance, of iodides, followed later, possibly, by mercury. Mild to moderately severe cases may be materially helped by treatment. In all such cases treatment must be begun with iodides and mercury at the start because of fear of the Herxheimer reaction and therapeutic paradox (see Hepatic Treatment). Bismuth may be substituted for mercury at the end of six weeks. Arsphenamine should not be used at all in late cases with serious cardiovascular syphilis. Even in milder cases it should not be used until after six months preparation as above outlined, and then very small doses of neoarsphenamine beginning with say 0.1 gm. of neoarsphenamine may be tried, increasing the dosage slowly according to tolerance, to a maximum of 0.3 gm. For management of complicated cases, see standard texts or, better, call consultation.

Singular and Plural

We'll begin with box, the plural is boxes,
But the plural of ox is oxen, not oxes.
One fowl is a goose, but two are called geese,
Yet the plural of mouse is never meese.
You may find a lone mouse, or a whole nest of mice,
But the plural of house is houses, not hice.
If the plural of man is always men,
Why shouldn't the plural of pan be called pen?
If I speak of a foot and you show me two feet,
And if I give you a boot, would a pair be called beet?
If one is a tooth and a whole set are teeth,
Why shouldn't the plural of booth be called beeth?
If the singular's this and the plural these,
Should the plural of kiss ever be keese?
We speak of a brother and also of brethren,
But though we say mother, we never say methren,
Then the masculine pronouns are he, his and him,
But imagine the feminine, she, shis and shim.
So, what?

WALTER L. O'DONNELL in
World's Digest.

JOUR. M.S.M.S.



The Editor's Easy Chair

SOCIALIZING MEDICINE

THE *New York Times* of Sunday, November 7, contained an article of a disquieting nature to the medical profession of the United States, which described what seemed to be an out and out declaration of four hundred and thirty prominent members of the profession for state or socialized medicine for all classes of the country. It is called "A Medical Declaration of Independence." A few months ago, we reviewed in this JOURNAL a two-volume work entitled, "American Medicine, Expert Testimony out of Court." This apparently innocent work contained excerpts from letters written by approximately five thousand physicians from all over the United States. In our review, about the only conclusion that could be drawn was the fact that the volumes contained all shades of medical opinion on the subject of the quality and distribution of medical care, that so far as our reading of the volumes could determine, those in teaching or public health positions favored regimentation and state control of medicine. Those in private practice opposed it.

* * *

We have read over the list of physicians in the *Times* who have declared that a (quoting the exact words) "national health policy directed towards all groups of the population should be formulated." We wonder if words carry the same meaning to all of us. If so, this looks as if the recalcitrant four hundred and thirty are urging the socializing of medicine. We note a number from Michigan: one a capitalist M.D. not in practice, the head of the State Board of Health, also the Commissioner of Health from Detroit and two or three medical college professors and one past-president of the Michigan State Medical Society. The right of freedom of speech and any view that may appeal to one is conceded. Voltaire once said, "I do not agree with a thing you say, but I will fight to the last to insure you the right to say it." Perhaps

it were better for all, that those who favor the socialization of medicine should so declare themselves, since so many of us have taken the side against it.

There are two conflicting viewpoints on the subject of state medicine. The person who is employed by the state naturally is strong for the method and source of his income; the individual, be he merchant or physician, who has made a position for himself, be it large or small, is just as strong in the matter of conservation of his means of livelihood as are salaried persons, whether professor, health officer or social worker. For this is what it means in either case. No physician can render the best type of medical service if he is hampered financially.

* * *

Nor can he serve the public to the best of his ability if he is subject to too much control. And there can be no socialization without it, namely, the ordering by someone, or by some group placed in authority, and in the matter of state medicine, not a medical group. State socialism, as everyone knows, exists in our state supported schools, in state hospitals and in everything else in which the worker looks to the state for his income. To the expression, "He who pays the piper calls the tune," there are but few exceptions. Among them is the duty of paying taxes without a voice as to how said revenues will be spent.

* * *

According to all accounts, socialized medicine is satisfactory among such homogeneous populations as Denmark, Norway and Sweden, where it has existed over a long period of time. There is a gradual adjustment to it, so that the people may feel that the matter of freedom does not enter into it. We still feel, however, that systems of state medicine cannot be imported from Europe or any other country and made to fit conditions in the United States. The United States was born in revolt; it is peopled by a great many citizens who have sought our shores as preferable to their home lands. In other words, in a spirit of protest they left the land of their nativity for the freedom that goes with the individualism of American life. To use a very homely expression, our people are not trained "to walk in harness." This may or may not be the

most ideal condition of society, but it suits us.

* * *

The tendency towards the totalitarian state, so-called, is one of the paradoxes of present day society. The past nineteen centuries of history have been centuries of struggle against despots; an effort to substitute rule by law for rule by caprice. This is seen in such great historic documents as the Magna Charta, insuring trial by jury, the Bill of Rights, Habeas Corpus and various other constitutional acts for the establishment and safeguarding of individual rights. The central idea in each is embodied in our own constitution. And we see in less than a generation, particularly in Europe, a disposition to cast all this aside for new and untried political systems. There is nothing new in socialism. The idea was born a little over a century ago in the brain of one Robert Owen, an English manufacturer. Present day socialism is harking back to the dreams of some visionary writer who died, unhonored and unsung.

Those who oppose a radical change are dubbed "Reactionaries." It should not be forgotten, however, that the great accomplishments of medicine, particularly of preventive medicine, would not have been effected, were it not for the efforts of the entire medical profession. Not only this, but without coöperation of the individual medical practitioner, the work of boards of health even, would be almost wholly ineffective.

* * *

Probably never before has any profession manifest a disposition towards self-improvement as the medical profession during the past one or two decades. This is seen in the vast quantity of books published and kept up to date by revision which is reflected in the demand of the general practitioner for information in regard to the latest developments in medicine; also seen in attendance upon clinics and medical society meetings but perhaps most of all in the pursuit of postgraduate work in special fields. Since the urge towards professional betterment has become so universal, surely the matter of improvement in the quality of medical care is receiving serious consideration of the medical profession as a whole. Those who qualify will render service to

which the public is entitled. Those who do not will find themselves eliminated from the profession. The fittest will survive.

Nutrition Problems in Education

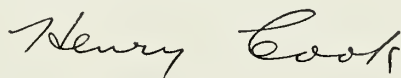
JAMES S. MCLESTER, Birmingham, Ala. (*Journal A. M. A.*, Sept. 11, 1937), declares that to evaluate properly the nutritional status of the child is no easy matter. There are today few short cuts to diagnosis in medicine and none to the recognition of the nutritive status of large groups of school children. In this field, as in so many others in medicine, dependence must be placed on careful general observation and the putting together of the information obtained from many sources. Adequate and optimum as related to diet are by no means synonymous. The aim should be to reach the optimum. In the Birmingham public schools it is realized that the child should have the optimal diet and that to secure this for him will require not only supervision but also education of three groups: the pupil, the parent and the teacher. The greatest energy should be expended not on individual, selected children but rather on the student body as a whole. Only too often home visitors, nutrition workers and school nurses become keenly interested in the individual case of obvious nutritional failure and focus all attention on this one child. Experience taught those in the Birmingham schools many years ago the great educational value of the nutrition class. The underweight and otherwise undernourished children were placed in special classes and given intensive instruction in nutrition. In addition, each child was required to take specified amounts of milk, and graphic wall charts were kept of the gains in growth and weight. At intervals graduation exercises were held and pupils who had reached the requisite body weight and nutritional status were given an appropriate diploma. The instruction given in these classes gradually percolated throughout the entire school and came in time to influence the dietary habits of an appreciable proportion of all the pupils. It was early noted, for example, that the milk sales in the lunch room were increased in each of the schools in which nutrition classes were established. Also, the influence of the class reached into the home and not infrequently influenced the dietary habits of the pupil's entire family. The greatest part of the instruction is given by the teacher. She is asked to correlate this instruction with her other work; for example, the writing of theses on nutrition may be used as a drill in English or the making of nutrition posters in the study of art. Of great importance are the auditorium exercises, of which the schools of Birmingham devote one each week to health. There are lectures on health and other exercises, and not infrequently a play about health is staged by the pupils. Of great help in this field of instruction is the example set by the lunch room. Although for various reasons the lunch room may best be conducted by an independent school agency, the maintenance of a relationship of cordial helpfulness between this agency and the department of child health is not difficult. The department of child health of the Birmingham schools has no direct authority in the lunch room, but its advice is frequently sought on important matters, and its suggestions have always been adopted without question. In this way it has been possible to provide menus that are both nourishing and wholesome, and the example of these has been of distinct educational value.

President's Page

PROGRAM OF YOUR STATE SOCIETY, 1938

- I. Leadership in formation of a Michigan Health League:
Physicians, dentists, nurses, pharmacists, funeral directors, laymen.
- II. Strengthening County Society organization to the end that it assumes aggressive medical leadership in the community:
 1. Health education of the public (radio and personal appearances);
 2. Contacts with governmental officials and agencies in solution of their medical problems;
 3. Develop programs to fit new laws and medical regulations;
 4. Regional meetings with State Councilors, officers, and delegates, to accomplish greater county society activity.
- III. Developing and executing programs for more complete distribution of medical services to *all* groups:
 1. Recommendation of various types of medical programs now in use, best applicable to individual counties.
 2. Medical service to the *indigent* in accordance with new welfare laws:
 - (a) Direct outdoor medical relief;
 - (b) Continuation of coöperative work under the Afflicted Child and the Crippled Child laws;
 - (c) Medical service to Old Age Pensioners, the blind, and widows;
 3. Medical service plans to the Borderline Group who need deferred payment plan (many need not be indigent, if a coöperative plan is developed);
 4. Continuation of good service to the Economically Comfortable in your own community on a reasonable competitive basis.
- IV. Continuing with renewed vigor the well-developed Scientific Program of treatment—and the development of prevention and control—of syphilis, tuberculosis, cancer, preventive medicine, accident prevention, etc., and elaborating existing educational programs, such as the post-graduate extension courses.
Physicians take the initiative, and coöperate with other groups.
- V. Increasing the membership of county medical societies, on the basis of above activities.

Respectfully submitted,



President, Michigan State Medical Society.



PARTNERSHIPS

By HENRY C. BLACK and ALLISON E. SKAGGS

PARTNERSHIP associations are so frequent in the practice of medicine that it seems desirable to discuss some of their advantages and disadvantages, and some of the steps that ought to be taken to assure their success. In many cases partnerships actually exist without the knowledge of the partners themselves, for, while they were sharing in the combined profits and each was jointly liable for the business obligations of the other, there was no partnership agreement and one considered himself the employer and the other the employee. This is more likely to happen when an older and more experienced doctor takes an assistant to help him handle a large practice, than when two men of similar age and qualifications associate in order to afford better equipment and more leisure time. If there is any one thing that is of paramount importance to the success of either association it is having a definite partnership agreement with the major points of importance decided upon in advance.

Partners may share their profits without sharing ownership of the physical assets of the practice, or they may share certain of the physical assets without sharing all of them. On the other hand, the two may own all of their equipment jointly, collect and retain their own fees for the work they do and yet in a strict sense not be partners at all. In the last analysis the most important factor in deciding whether or not a partnership exists when there is no regular contract or agreement, is whether or not there is a division of the profits.

The advantages of a partnership are much more apparent than its disadvantages, and fortunately most of the disadvantages may be eliminated by a thorough understanding of them and proper arrangements made at the start. Some of the more apparent advantages are as follows: First, the availability of more complete equipment with less individual investment; second, the possibility of more leisure time without neglect of the patient; third, the benefits of friendly advice and assistance in difficult cases;

fourth, the stability of income through periods of illness or absence of one of the partners. Some of the commonly considered disadvantages are: First, the liability of each partner for the combined business obligations; second, the chance of such a clash of personalities as to make the arrangement distasteful to one or both; third, the possibility that one partner may study and develop far more rapidly than the other, thus throwing the original arrangements out of line; fourth, the complications of a liquidation.

In order to gain the benefits and avoid the disadvantages of a partnership, personality, financial responsibility and ambition should be carefully considered by each partner before the association is made. Then, these things being decided favorably, a partnership agreement should be put in writing, properly drawn up by a competent attorney who has been taken into the complete confidence of both partners. This agreement should be brief and yet cover the important phases of the partnership, such as the ownership of assets, the division of profits, the liabilities and responsibilities of each, the method of changing the relationship, the time of the partnership, and the manner of liquidation in case of the death of a partner. This agreement should not attempt, however, to anticipate every minor situation which might arise, or it will become so ambiguous as to become less effective than no agreement at all.

One question which often arises when two doctors go in together is what to do about their respective accounts receivable. They may be pooled at the start, collected by the individual partners, or collected by the partnership and the money applied on the old bill of one of the doctors. The latter method is usually better as in this manner each partner is able to receive in full any money paid in on one of his old accounts, yet there is no extraordinary pressure brought to bear in collecting accounts which were contracted prior to the association, and consequently there need be no damage to good will.

Often there is an advantage in having the computation and distribution of the earnings made by someone other than the partners

themselves. This is more particularly true when the partners do not share alike, as the judgment of one as to what should be considered as costs might possibly be affected by his interest in those costs. This should, however, be done by someone well versed in the principles involved and whose judgment in these situations can be relied upon. Here again the importance of adequate financial records cannot be over-emphasized, and this refers not only to receipts and expenditures but to assets and liabilities as well. The determination of what should be classified as equipment and the rate of depreciation that should be used must be considered in the calculation of the profits; otherwise the necessary reserves for replacements to maintain the initial investment will not be established and the partnership will be dividing up its assets as well as its profits.

Because of the rights of creditors and legatees, it is very important that the partnership anticipate the procedure to be followed in the event of the death of one of the partners. This may be done by having a purchase agreement whereby either partner agrees to buy out the other's interest in the event of his death, and if possible the sale price should be previously determined in order to eliminate the necessity of appraisals. In this way the surviving partner may carry on the practice without the necessity of being embarrassed by a hurried liquidation of the patients' accounts or a forced sale of equipment. In order to provide the necessary funds required by such an agreement, a life insurance trust is sometimes entered into whereby each partner carries life insurance on the other payable to a trust company, which, in the event of death of one of the partners, delivers a bill of sale to the survivor, at the same time turning over to the estate of the other the funds received from the insurance. There are many other ways in which the same result can be accomplished, and each situation demands a little different handling.

There are numbers of partnerships which function smoothly with considerable advantage to the doctors, but practically without exception they do so because the methods for solution of the major problems which might come up were settled before the association began, and the business affairs of the partnership were planned and handled in a business-like way.

IN MEMORIAM

Dr. Henry J. Hartz

Dr. Henry J. Hartz, a prominent member of the medical profession of Detroit and Michigan for many years, died on November 26. He was born in Germany near the Kiel Canal, seventy-five years ago and at the age of seven came with his parents to Detroit. He was educated in the Detroit public schools and was graduated from the Detroit College of Medicine in 1889. Dr. Hartz took post-graduate work at London, Berlin and Vienna, and later limited his practice to diseases of the ear, nose and throat. However, his major interest was in the treatment of tuberculosis. He was one of the first to give open-air treatment, which he began in 1905 in a tent behind Herman Kiefer Hospital. In 1927, the Detroit Board of Education named the Henry J. Hartz Open Air School in his honor. Dr. Hartz was the first president of the board of the State Tuberculosis Sanitarium at Howell, and served as trustee for twenty-two years. He was one of the founders of the Detroit Tuberculosis Society and he also served as treasurer of the state society for a number of years. His military service was at Camp Custer and Camp Dodge, Ia., where he was president of the board of medical examiners for tuberculosis. Dr. Hartz was blind for more than ten years. His medical writings include "Bacteriology in Medicine," "Pathology of Pulmonary Tuberculosis" and "Lymphatics of the Nasopharynx." Dr. Hartz was a member of the Wayne County, Michigan State and American Medical Associations; the National Tuberculosis Association, American Triological Society and the Academy of Ophthalmology. He was also a member of the Detroit Club, The Detroit Golf Club and the Boat Club, the Detroit Athletic Club and the Country Club. He is survived by his wife, Elizabeth; a daughter, Mrs. John Cushing of Fort Wayne; a son, Read; a brother, J. F. Hartz, who is head of the J. F. Hartz Company, Detroit; and two sisters, Mrs. Sylvester Evans and Mrs. William Heidin.

Dr. A. S. Rowley

Dr. Arthur Shoudy Rowley of Traverse City, Michigan, died at his home on October 24, 1937, of a coronary heart disease of four years' duration.

During his long residence in Traverse City, Dr. Rowley was an important figure in the social and fraternal life of the community. He was a Fellow of the American Medical Association, first president of the Grand Traverse County Medical Society, organized June 10, 1902; Past-Eminent Commander of Traverse City Commandery No. 41, Knights Templar, a member of Saladin Temple of Grand Rapids, President of the local Rotary Club in 1922-23, and a former member of the high school athletic board of control.

Born in Syracuse, N. Y., June 29, 1866, Dr. Rowley moved to Kalamazoo with his parents when two years of age. He was graduated from the Kalamazoo high school, took pre-medical work at Kalamazoo College, and, in 1890, received his medical degree from the University of Michigan. He interned at the University Hospital, from where he came to the Traverse City State Hospital, later becoming assistant superintendent, a post he held until his appointment as state prison psychiatrist in 1924. In 1933, he retired and returned to Traverse City.

(Continued on Page 989)

DEPARTMENT OF SOCIETY ACTIVITY

L. FERNALD FOSTER, M.D., Secretary

"COMMITTEE OF PHYSICIANS"

The Board of Trustees of the American Medical Association on November 20 published a statement concerning the principles and proposals of the Committee of Physicians, from which are quoted the following extracts:

"Following the publication of the report of the American Foundation Studies in Government, a small group of physicians, assembled in New York, developed certain principles and proposals which have since been circulated by a self-appointed Committee of Physicians among the medical profession of the United States, with a view to obtaining signature in their support. During a period of approximately six months, some 430 medical men have apparently permitted the use of their names. Early in November the self-appointed group of physicians released to the press for Sunday, November 7, a statement of principles and proposals. The newspapers generally heralded this action as a revolt against the American Medical Association, in a great majority of the cases indicating that there was a revolt in behalf of "state medicine." The publication of this manifesto and the attached signatures has been heralded with glee by many of those who have been opposing the American Medical Association in behalf of coöperative practice, sickness insurance, and various fundamental changes in the nature of the practice of medicine. Within the last week another series of proposals has come from another self-appointed group requesting signatures of physicians. This series of proposals includes the suggestion for enabling legislation for sickness insurance.

"At the Atlantic City session the delegates from New York State presented these principles and proposals slightly modified. The House of Delegates, after thorough consideration of the report of the reference committee, and with full cognizance of the method of development of these principles and proposals, did not accept them. The House of Delegates did, however, point out the willingness of the medical profession, with other agencies, to do its utmost today, as in the past, to provide adequate medical service for all those unable to pay either in whole or in part.

"Until the regularly chosen representatives of the 106,000 physicians who constitute the membership of the American Medical Association determine, after due consideration, that some fundamental change or revolution in the nature of development, distribution and payment for medical service in the United States is necessary, physicians will do well to abide by the principles which the House of Delegates has established. They will at the same time deprecate any attempts inclined to lead the executive and legislative branches of our government, as well as the people of the United States, into the belief that the American medical profession is disorganized.

"The American Medical Association has reaffirmed its willingness on receipt of direct request to coöperate with any governmental or other qualified agency and to make available the information, observations and results of investigation, together with any facilities of the Association. Thus far, no call has come from any governmental or other qualified agency for the coöperation of the American Medical Association in studying the need of all or of any groups of the people for medical service, to determine to what extent any considerable proportion of our public are actually suffering from lack of medical care. The offer still stands as evidence of the willingness of the American Medical Association to aid in finding a solution to any or all of the problems in the field of medical care that now prevail."

The Michigan Statement

The Michigan State Medical Society's Executive Committee of The Council, on November 10, 1937, approved a statement on the activities of the Committee of Physicians, from which we quote the following:

"The Committee of Physicians, an unofficial but apparently well financed group, is using the nation's press to convey the erroneous impression that individual physicians (a majority of whom are loyal supporters of the American Medical Association) are opposed to the policies of the A.M.A. This is not true.

"The action is an endeavor to discredit the National Medical Association, after an unsuccessful attempt to force similar principles and proposals upon the American Medical Association's House of Delegates last June.

"The county and state medical societies and the American Medical Association have been and are making every effort to solve the problem of the distribution of medical care to all groups of society. Solution will come only through coöperative efforts of the organized medical profession with various health associations, such as state and county health units and lay agencies. It will not come through self-appointed agencies such as now are trying to force the hand of the American Medical Association."

Don't Sign a Blank Check

Physicians are urged, in matters of public interest, to deal only through regular channels (the county, state and national medical societies) in order that the greatest good for the people is accomplished.

Physicians should consult medical society officers for the facts before signing statements which can be used in future to "sell short" the entire medical profession.

ANTENUPTIAL PHYSICAL EXAMINATION LAW

THE recent Michigan law which bans marriage for any individual who shows a positive Wassermann test was the subject of consideration by the Executive Committee of The Council, M.S.M.S., on October 17. The Executive Committee pointed out that the statute does not recognize the right to marriage of clinically arrested patients, with positive serological findings, who are not infectious. In addition, the law does not adequately define the term "venereal disease," and not enough stress is laid upon the physical examinations required, as in some instances such examination must include neurological, eye, ear and other tests, in addition to the laboratory test. (For full text of the Resolution, see minutes of the Executive Committee of The Council, page 990.)

Many persons believe that both applicants for the medical certificates must go to the same physician. Such is not the case. They should consult their individual doctor of medicine.

The importance of early treatment, and the penalty of neglect of syphilis, was also discussed by the Executive Committee. Not infrequently a case of syphilis, treated in its initial or primary stages, can be cured in eighteen months. However, three years is recognized as the average time required to treat many cases, especially those that have reached the secondary or tertiary stages.

The Advisory Committee on Syphilis Control of the Michigan State Medical Society has prepared an Outline of Suggested Treatment of Syphilis, which will be disseminated by the State Department of Health to physicians upon application for drugs. This Outline is published in full in this issue of THE JOURNAL, page 979.

STATE SALES TAX

The State Sales Tax is not levied on physicians' fees. However, if a practitioner furnishes drugs or supplies (such as spectacles) and charges for them in addition to his professional fee, the sales tax applies to the goods thus transferred (but not to the fee for professional services). This was announced to the medical profession in the September, 1933, JOURNAL, page 528, shortly after the State Sales Tax Law was enacted.

Since 1933, the State Tax Board has

promulgated two amendments or clarifications of the rule to the effect that where the physician, such as an oculist, does not segregate the amount charged for the professional service from the amount charged for the goods, such as eyeglasses, the sales tax shall apply to one-half of the sale price charged by the physician. In other words, the sales tax shall apply to one-half of the sale price of goods sold by physicians where the sale price includes professional services.

MEDICAL INFORMATION IN INSURANCE CASES

The House of Delegates of the Michigan State Medical Society at its Grand Rapids meeting, September 27, 1937, reiterated its stand taken in Jackson on September 18, 1929, relative to special information and reports requested of practitioners of medicine by insurance companies.

The 1929 Resolutions, unchanged at the 1937 session, are as follows:

Resolution No. I

BE IT RESOLVED, that physicians charge a fee of not less than \$2.00 to Old Line Life Insurance Companies for rendering special reports of the health and physical condition of prospective applicants for insurance, the fee to be increased according to the degree of service, and

Further, that no report be given to an insurance company without the applicant's full consent.

Resolution No. II

BE IT RESOLVED, that physicians charge a fee of not less than \$2.00 to Health and Accident Insurance Companies for each preliminary and final claim proof, the fee to be increased according to the type of service rendered, and

Further, that physicians be not required to make affidavits to statements on claim proofs.

IN MEMORIAM

(Continued from Page 987)

During the World War he was assigned to Camp Sherman, Chillicothe, Ohio.

On April 24, 1901, Dr. Rowley married Miss Josephine Wilhelm of Traverse City, who survives, as does a son, Julius Rowley, of Lansing; and a daughter, Alice Rowley, at home.

Dr. Rowley was placed upon the Retired Membership Roll of the Michigan State Medical Society during the Soo meeting.

Executive Committee of the Council

October 17, 1937

HIGHLIGHTS:

1. 1938 Annual Meeting set for Book-Cadillac Hotel, Detroit, September 19, 20, 21, 22.
2. Recommendations made to improve Antenuptial Physical Examination Law.
3. Requirements for Nurses Training Schools to be discussed with Nurses' State Board, State Hospital Association, and State Nurses' Association.
4. Consulting Service in prisons inaugurated.
5. Council committees for 1937-38 appointed.

1. *Roll Call.*—The meeting was called to order by Dr. P. R. Urmston, Chairman, at 3:20 P. M. in the Statler Hotel, Detroit. Those present included Drs. Urmston, A. S. Brunk, H. R. Carstens, I. W. Greene, V. M. Moore and P. A. Riley. Also present were Drs. Henry Cook, L. Fernald Foster, H. A. Luce, L. W. Shaffer, and Executive Secretary Wm. J. Burns.

2. *Minutes.*—The minutes of the Council meeting of Grand Rapids, Sept. 26, 27, 28, 1937 (annual meeting of The Council), were read and approved, on motion of Drs. Greene-Brunk.

3. (a) *Financial Report.*—The financial report was presented and thoroughly discussed. The statement of the income and expenses of the 1937 annual meeting was presented. The matter of funds of the Joint Committee, intermingled with those of the M.S.M.S., was discussed; the Chairman of the Finance Committee, Dr. Carstens, was requested to communicate with Drs. Bruce and Corbus re turning the Joint Committee account over to the U. of M.

(b) *Bills Payable.*—Bills payable for the month of October, as listed, were ordered paid on motion of Drs. Carstens-Brunk. Carried unanimously.

(c) *Bonds.*—A report on the bonds was given by Dr. Moore, for Treasurer Hyland. The present face value of bonds in the General Fund is \$24,000; in the Medico-Legal Fund, \$15,500; a total, at face value, of \$39,500 (not including the 96 shares common stock of National Gas & Electric Corp.). The Chair stated that the Bond Committee would be composed of Drs. Hyland, Moore and Carstens, and thanked Dr. Moore for his report and suggestions.

4. *Referred from the House of Delegates to The Council:*

(a) *Inspectors for State Board of Registration in Medicine.* This was discussed, and on motion of Drs. Carstens-Brunk, the Executive Secretary was instructed to confer with the Secretary of the State Board of Registration in Medicine regarding this matter, the best methods of accomplishing the desired result, and to report back to the Executive Committee. Carried unanimously.

(b) *Requirements for Nurses' Training School.* Dr. Cook reported on this matter; a meeting is being arranged for November 3 in Detroit with the nurses, to discuss this problem. Motion of Drs. Carstens-Riley that the matter be referred to the Contact Committee to Governmental Agencies, plus Drs. I. W. Greene and L. Fernald Foster. Carried unanimously.

5. *Syphilis Control.*—Dr. Shaffer, Chairman of the Advisory Committee on Syphilis Control, presented a report, and discussed the Wassermann-fast case. The request of a Detroit newspaper for a release re the new Prenuptial Physical Examination Law, was presented; motion of Dr. Moore, seconded by several, that the Chairman appoint a committee (Drs. Luce, Shaffer, Cook and Foster) to prepare a statement for the newspaper. Carried unanimously. The committee retired, to prepare this statement.

Subsequently, the following resolution was presented by the Committee:

Whereas, The 1937 Legislature in the State of Michigan in Act 207 provided for an antenuptial physical examination to determine the existence or nonexistence of any venereal disease in prospective applicants for marriage; and

Whereas, insufficient stress is laid upon the physical examinations; and

Whereas, no provision is made in the law for the recognition of the right to marriage of clinically arrested patients with positive serological findings (the so-called Wassermann-fast patients) who are not infectious; now, therefore be it

Resolved, that the Executive Committee of the M.S.M.S. heartily approves the intent of the law and pledges its support to this worthy Preventive Medicine measure, that it recommend that the term venereal diseases be clarified, since there are other diseases besides gonorrhea and syphilis which are venereal; and

Be it further recommended that special emphasis be placed on the clinical examinations, since they are not sufficiently recognized in the law or on the certificate. It is further recommended that subsequent provision be considered in the law for the clinically arrested patients (Wassermann-fast patients). It is further recommended that recognition be had of the fact that varying stages of the diseases require varying types and repeated examinations, if the intent of the law is to be attained.

Motion of Drs. Brunk-Riley that the above resolution be adopted. Carried unanimously.

6. *The Chairman instructed the Executive Secretary* to send, in future, the minutes of all committee meetings, as well as those of the Executive Committee of The Council, to all members of the Council.

7. *Parole Commission.*—Dr. Riley, Chairman of the Contact Committee with Parole Commission, reported on the work of his committee:

(a) Consulting service of specialists in prisons was discussed. Motion of Drs. Riley-Greene that a questionnaire be sent to members of the M.S.M.S., with a request to the secretary of each component county society that the matter be presented at the next meeting. Carried unanimously.

(b) *Internes for the prisons* was discussed. Motion of Drs. Brunk-Carstens that a letter shall be written to the Deans of the two medical schools in Michigan, inquiring if they wish to use the material at the prisons and develop plans whereby said material could be utilized. Carried unanimously.

8. *Medico-Legal.*—Report was given by the Secretary of the Medico-Legal Committee re the Smith case. Motion of Drs. Moore-Brunk that the Secretary be empowered to get a legal opinion on this matter. Carried unanimously.

9. *1938 Annual Meeting Plans.*—Dr. Foster read

several letters from the Medical Exhibitors Association and from individual exhibitors at the 1937 annual meeting, expressing enthusiasm over the convention. The plans of several prospective headquarters were studied for the 1938 meeting. The Executive Committee instructed that the M.S.M.S. must be the only convention in the hotel, if a hotel is selected. Motion of Drs. Brunk-Moore that the 1938 Convention of the Michigan State Medical Society be held in Detroit on Sept. 18, 19, 20, 21, 22, 1938, and that the matter of deciding which Detroit headquarters shall be utilized, be left to the Secretary and the Executive Secretary, after full investigation of all facilities. Carried unanimously.

10. *Proposed Bureau of Public Relations in A.M.A.*—Secretary Olin West's letter of Sept. 28, 1937, was read by Secretary Foster. The Secretary was instructed to write to Dr. West.

11. *Secretaries Conference.*—Motion of Drs. Carstens-Brunk that the Chairman of The Council, the President, and the Executive Secretary of the M.S.M.S. be authorized to attend the State Secretaries Conference in Chicago on November 19 and 20, 1937. Carried unanimously.

12. *Thanks.*—Drs. John Wetzel, Robt. S. Breakey, O. B. McGillicuddy, W. E. McNamara and E. I. Carr, of Lansing, were thanked for their contribution to the Society's legislative work during the past session.

Drs. A. M. Campbell, H. A. Furlong, H. H. Cummings, and N. R. Kretzschmar were given a vote of thanks for their postgraduate work in the Upper Peninsula on October 8, 15, 22, and 29, 1937.

The Statler Hotel, and Mr. Joe M. Busha, were thanked for their hospitality in connection with this meeting of the Executive Committee.

13. *Council Committees for 1937-38.*—Chairman Urmoston announced the following committees of The Council for the ensuing year:

Finance Committee: Henry R. Carstens, Chairman, Vernor M. Moore, F. C. Bandy, Wm. E. Barstow, W. A. Manthei.

County Societies Committee: I. W. Greene, Chairman, Wilfrid Haughey, George A. Sherman, H. H. Cummings, B. H. VanLeuven, E. F. Sladek.

Publications Committee: A. S. Brunk, Chairman, J. Earl McIntyre, F. T. Andrews, Roy H. Holmes, T. F. Heavenrich.

Dr. Cook spoke of the Wayne County Medical Society personnel on the Legislative Committee.

14. *Questionnaire for Councilors.*—The proposed questions, to aid councilors in their semi-annual reports (as per instructions of the House of Delegates at its 1937 meeting) were read by Secretary Foster and referred to the Chairman of the County Societies Committee, Dr. Greene.

15. *Press Committee.*—A letter from the Detroit Free Press commending Dr. J. Duane Miller of Grand Rapids on his excellent work as Chairman of the Press Committee was read to the Executive Committee of The Council.

16. *Adjournment.*—The meeting was adjourned at 10:45 p. m. The Chair thanked all for their attendance and good advice.

Her Only Fault—A prominent business man fell in love with an actress and decided to marry her, but for the sake of prudence he employed a private detective to report on her life. When he received the report, it read as follows:

"The lady has an excellent reputation, her past is without blemish, she has an excellent circle of pleasant friends—the only breath of scandal is that lately she has been seen a great deal in the company of a business man of doubtful repute."—Hamilton Spectator.

ANNUAL CONFERENCE OF STATE MEDICAL SOCIETY SECRETARIES AND EDITORS

Once each year the secretaries of the state medical societies and the editors of state medical societies meet in conference at the American Medical Association headquarters in Chicago. The Michigan State Medical Society was represented at the annual conference, November 19 and 20, by Dr. L. Fernald Foster, secretary; William J. Burns, executive secretary, and Dr. J. H. Dempster, editor of THE JOURNAL of the Michigan State Medical Society.

The meeting was called to order by Dr. Arthur W. Booth, chairman of the board of trustees of the American Medical Association, who called upon Dr. J. H. J. Upham, president of the American Medical Association, to address the conference. Dr. Upham gave his impressions of medicine gleaned from his official visits during his term as president-elect and as president. The papers presented at the various state meetings were of a high type. The general trend of scientific contributions was excellent. There was noted, in some quarters, a lack of organization. He spoke of the economic and scientific phases of medicine as interdependent. He spoke of the old-time doctor, who sent out statements once or twice a year and sometimes not at all. He had been superseded by the more business-like type of doctor who employed an office assistant to look after the business side of his work, which was a great improvement since it enabled the doctor to equip himself professionally for better work. Dr. Upham felt that the time was ripe for state medical societies to employ full-time executives—doctors or qualified laymen—to deal with the matter of organization just as the individual doctor had come to look to a qualified office assistant to look after the economic side of his practice.

The subject, "Student Health Services: A Challenge to Medical Societies," was discussed by Dr. J. D. Laux of the Bureau of Medical Economics of the American Medical Association. Dr. Laux emphasized the idea that Student Health Departments of Colleges should confine their activities to such subjects as Hygiene and General Health conditions as they affected college life and should not render treatment beyond first aid to individual students. Where the work of the private physician was usurped, the health service was remiss in its duty to the student body as a whole. County medical societies in counties in which colleges were located should assert themselves so as to prevent encroachment on their practice, which includes all sick persons in their community. The attendance upon the sick by doctors employed by colleges raised the question of practice of medicine by corporations. Students should be taught to use the medical services of the community.

Dr. Irvin Abell, president-elect of the American Medical Association, was introduced. He spoke briefly, deploring the fact that groups within the association should address themselves to the public independently. Organized medicine could be articulate only through the American Medical Association and not through any other group, since the American Medical Association was the only organization, democratic inasmuch as its governing body, the House of Delegates, was composed of men selected by state societies all over the United States.

Dr. Olin West referred to the Committee of Physicians, apparently well-financed, who were distributing a set of principles and press releases to the newspapers. (On page 988 of this number of THE JOURNAL of the Michigan State Medical Society will be found the authorized statement of

the Board of Trustees of the A.M.A. on this subject.) He went on to speak on the movement in the District of Columbia to furnish medical service to government employees outside the Army and Navy, which had their own medical departments. This service was in vogue also in Denver, Colorado. It was bound to spread and it was well that every member of the organized medical profession should inform himself of the movement. It began with the inclusion of H.O.L.C. employees, but may include all government employees of any income.

Dr. Walter F. Donaldson of Pittsburg, the chairman of the conference, introduced the subject of Extension Postgraduate Courses of State Medical Associations. The subject was discussed by Dr. Creighton Barker of New Haven; Dr. T. W. M. Long of North Carolina, and Dr. Holman Taylor of Texas. The burden of the discussion was that every effort should be made to bring postgraduate opportunities as near as possible to the door of physicians in active practice who could find neither time nor money to attend extensive courses at remote medical centers. So far as brought out in the discussion, none of the states had offered greater opportunities than those afforded in Michigan in the well organized set-up under the auspices of the Michigan State Medical Society, not to mention the intensive work of the major county medical societies and specialized groups within them.

Dr. Eben J. Carey of Milwaukee discussed the uses and benefits of exhibits under the auspices of state medical associations. The speaker presented lantern views of the hall in Milwaukee in which exhibits were held which showed capacity crowds in attendance. Discussing the subject, Dr. Olin West emphasized the importance of careful and complete demonstration of the exhibits by competent persons, without which a good exhibit could be ineffective.

Dr. Peter Irving of New York read a paper on the state medical association's part in pneumonia control. He spoke of a large contribution made by the state of New York for the purchase of serum. The chief obstacle to complete and full use was the cost, which amounted to approximately sixty dollars per person. The serum used was prepared from the blood of the horse. Rabbit blood serum would be much cheaper, but had not been found satisfactory.

The evening of November 19 was the occasion of a dinner at the Palmer House for state medical editors. Dr. E. M. Shanklin, editor of the *Indiana State Medical Journal*, presided. An address on "Better Medical Contributions," was given by Dr. J. H. Dempster, editor of *THE JOURNAL* of the Michigan State Medical Society. The paper was discussed by Dr. G. H. Kress of California, Dr. Frank Overton of New Jersey, Dr. Holman Taylor of Texas, Dr. C. A. Smith of Washington, and Dr. Creighton Barker of New Haven. The subject of publication costs was discussed by Senator T. A. Hendricks of Indiana, and Mr. Wm. J. Burns, executive secretary of the Michigan State Medical Society.

Saturday morning, November 20, was devoted to a discussion of a number of subjects pertaining more to the legal and economic side of medicine under the leadership of Dr. W. C. Woodward, director of the Bureau of Legal Medicine and Legislation of the American Medical Association.

The first problem discussed was the subject of malpractice. This brought up the question of employment of the state medical society's counsel in the defense of any of the members of the society threatened with malpractice. A recent decision of the American Bar Association ruled against the

practice of law by banking and other corporations such as automobile clubs. Dr. Woodward advised cooperation between special committees such as medical defense of the state societies and local bar associations.

The next subject dealt with the taxation of state medical societies under Federal Revenue acts and social security acts. As of September 17, 1937, a number of state medical societies were declared to come under one or both while approximately an equal number were exempt. The status of a number of medical societies up to the time mentioned had not been determined.

COUNCIL AND COMMITTEE MEETINGS

1. Wednesday, November 3, 1937—Joint meeting of representatives of Michigan State Medical Society, Michigan State Nurses Association and State Board of Registration in Nursing—Hotel Statler, Detroit, 2:30 p. m.
2. Thursday, November 4, 1937—Maternal Health Committee—Hotel Statler, Detroit, 12:00 noon.
3. Wednesday, November 10, 1937—Executive Committee of The Council—Hotel Olds, Lansing, 1:00 p. m.
4. Wednesday, November 10, 1937—Legislative Committee with Executive Committee—Hotel Olds, Lansing, 7:00 p. m.
5. Thursday, November 11, 1937—Mental Hygiene Committee—Hotel Statler, Detroit, 4:00 p. m.
6. Sunday, November 14, 1937—Preventive Medicine Committee, Advisory Committee on Syphilis Control, and Tuberculosis Committee—Hotel Olds, Lansing, 10:00 a. m.
7. Wednesday, November 17, 1937—Advisory Committee to Woman's Auxiliary—Hotel Olds, Lansing, 6:30 p. m.
8. Wednesday, November 17, 1937—Representatives from M.S.M.S. and nursing organizations—Lansing, 1:00 p. m.
9. Wednesday, December 1, 1937—Michigan Health League—Hotel Statler, Detroit, 6:30 p. m.
10. Wednesday, December 8, 1937—Committee on Distribution of Medical Care—W.C.M.S. Building, Detroit, 11:00 a. m.

MINUTES OF MEETING OF CONTACT COMMITTEE WITH PAROLE COMMISSION

September 21, 1937

The meeting was held in the residence of Warden Joel R. Moore of Jackson Prison, on Tuesday, September 21, at 1:00 p. m. Present were Chairman Philip A. Riley, M.D., of the Contact Committee; Warden Moore; Mr. J. W. Miner, Chairman of the Prison Commission; Mr. Hilmer Gellein, Director of the Department of Correction; Dr. David P. Philips, psychiatrist; and Dr. Wm. L. Huntley, physician at Jackson Prison; Drs. P. R. Urmston, L. Fernald Foster, H. M. Pollard, Secretary of the U. of M. Medical School, and Wm. J. Burns.

Mr. Gellein gave a brief history of activities leading up to this meeting. Dr. Philips outlined the suggested program, divided into four classifications: (a) referring parolees to physicians for examination; (b) consultation service by specialists; (c) procuring of externs and internes for the three prisons, at Jackson, Ionia and Marquette; (d) teaching facilities for groups (ward walks). In a word, Dr. Philips asked the Michigan State Medical Society to act as an advisor to the Department of Corrections and Parole along medical lines. All points were discussed by those present. Dr. Urmston felt that the practical work should not be discontinued

but that further opportunity existed for teaching, with the vast material in these institutions.

Dr. Philips stated that eight out of ten who come to penal institutions have a physical handicap. Warden Moore advised that three out of four are repeaters, which may be due to a continuance of the physical handicap even after parole.

The Contact Committee with Parole Commission recommended to The Council of the Michigan State Medical Society that it devise a system to develop a consulting service for the prisons, which might be considered medical laboratories offering postgraduate opportunities for all practitioners.

The Contact Committee with Parole Commission also recommended to The Council of the State Society that the matter of securing externes and internes for the prisons be referred to the Deans of the two medical schools in Michigan, for specific recommendations (as this phase involves the curricula of the schools).

The meeting was adjourned at 4:00 p. m., with thanks being extended to Mr. Moore for his hospitality.

MINUTES OF COMMITTEE ORGANIZATIONAL MEETING

September 30, 1937

1. The meeting was called to order by President Henry Cook in the Pantlind Hotel, Grand Rapids, at 12 noon. Present were Committeemen: Drs. L. O. Geib, C. D. Hart, Alexander M. Campbell, H. S. Collisi, Burton R. Corbus, T. K. Gruber, H. W. Porter, M. H. Hoffmann, A. V. Wenger, Councilors: Drs. W. A. Manthei, B. H. VanLeuven, W. E. Barstow, T. F. Heavenrich and President Cook, Council Chairman P. R. Urmston, Secretary L. Fernald Foster, and Exhibit Director T. G. Hull of the American Medical Association.

2. Dr. Cook presented his program for the State Society. Discussions of the 1938 plans were as follows:

- (a) By *Secretary Foster*: Integration of all plans and projects through the P.R.C. after such committee plans are completed, approved by the Executive Committee, and presented.
- (b) By *Dr. Corbus*: For the Joint Committee, he requested a list of speakers approved by the M.S.M.S., speakers especially for the subjects of syphilis, cancer, tuberculosis, social hygiene, etc.
- (c) By *Dr. Geib*: Reiterating a previous request that continued effort be made to secure a medical coördinator.
- (d) By *Dr. Barstow*: Requesting not only outlines but that complete lectures on Sex or Social Hygiene be provided to prospective speakers in the several counties.
- (e) By *Dr. Gruber*: That the subject of group hospitalization be studied and the proposed plans

be integrated and that consideration in the plans be given to the attitude of the State Board toward the internes and resident physicians.

- (f) By *Dr. Hoffmann*: Requesting list of benefits of membership for membership committee in its endeavor to secure all eligible non-members.
 - (g) By *Dr. Foster*: Announcing the policy of the Medical Protective Co. that hereafter only members of county medical and dental societies would be accepted for malpractice insurance.
 - (h) By *Dr. Porter*: Considering procedure to be followed by Ethics Committee. It was suggested that this be a board of review; that the Ethics Committee investigate complaints (presented in writing) and report its findings with recommendations to The Council.
 - (i) By *Dr. Campbell*: Discussing provisions of the Antenuptial Physical Examination Law.
 - (j) By *Dr. Gruber*: Suggesting a somewhat standard fee for Antenuptial Examination. The idea of the impracticability of this throughout the State was developed. It was suggested that the Secretary gather information re Antenuptial Law as it works in other States.
 - (k) By *Dr. Collisi*: Announcing his intention of securing data re Woman's Auxiliary work in other States.
 - (l) By *Dr. Urmston*: Urging active participation by all committees in the comprehensive program as outlined by Dr. Cook for 1938.
3. Adjournment at 2:20 p. m.

HOSPITAL UPHELD IN OSTEOPATH SUIT

Court Rules Hospital May Designate Practitioners

The right of the Board of Managers of Hurley Hospital to refuse to allow osteopaths to practice in the hospital was upheld by Circuit Judge Paul V. Gadola Wednesday, October 20, 1937.

Judge Gadola dismissed the motion of Doctors L. R. and H. H. Kesten, Flint osteopaths, asking a court order allowing them to refer patients to, and practice in, the municipal institution. The court held that the board has the right to designate who may practice in the hospital as long as the designation is made by class and not against individuals.

Ralph M. Hueston, Hurley superintendent, testified that the American College of Surgeons and the American Medical Society would refuse to approve the institution if osteopaths were admitted to practice.

Attorney Sherman Bean, counsel for the plaintiffs, was assisted by O. L. Smith, of Detroit, representing the state association of osteopaths. City Attorney Hymen Hoffman, defense counsel, was aided by Senator Earl W. Munshaw, Grand Rapids, counsel for the Michigan State Medical Society.

GOLFERS' SPECIAL TO 'FRISCO

for the A.M.A. Convention, June 13-17, 1938

New Orleans—Houston—Galveston—San Antonio—Los Angeles—Del Monte—San Francisco!
Return thru Portland—Seattle—Vancouver—Lake Louise—Banff!

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COUNTY SOCIETIES

BAY COUNTY

A. L. ZILIAK, M.D.
Secretary

The meeting of this society, held on October 27, was devoted to a business meeting and the various details of the Secretary's letters were discussed.

Under the discussion of the increase in dues for 1938, a resolution was passed commending the Officers, Council and Committeemen of the Michigan State Medical Society for their untiring efforts in the interest of the physicians of Michigan and heartily endorsing the necessary increase of dues.

BERRIEN COUNTY

A. F. BLIESMER, M.D.
Secretary

The regular monthly meeting was called to order by Dr. Emery, October 14, 1937. The correspondence was read.

Report of delegate, Dr. Wm. Ellet, to Michigan State Medical Society House of Delegates: A report was made of the election of state officers and of the raising of state dues to \$12.00. The report was accepted on a motion from the floor.

An announcement was made by Dr. Loupee of Dowagiac of the death of Dr. McCutcheon of Cass County. He spoke briefly of Dr. McCutcheon's medical life, stating that Dr. McCutcheon came to Cass County forty-three years ago to start practice and that during these many years he had maintained the highest standards of organized medicine. It was moved by Drs. Ellet-Burell that a letter of condolence be sent by the secretary to the widow of Dr. McCutcheon.

Dr. Moody then introduced the speaker of the evening, Dr. Wm. L. Brown of Chicago, Ill., Director of the Physicians Radium Association. Dr. Brown went into fundamentals of radiation and methods of treatment. A lengthy discussion followed Dr. Brown's talk.

The meeting was adjourned.

CALHOUN COUNTY

WILFRID HAUGHEY, M.D.
Secretary

The October meeting of the Calhoun County Medical Society was called to order by Vice President Rosenfeld, in the absence of the president, at Fiddle and Bow, Battle Creek, Tuesday evening, October 5, 1937, at 8:30 P. M.

Applications for membership were read of Dr. Wilma Weeks Rorick, U. of M. '25, Battle Creek, and Dr. R. W. Kinzel, University of Indiana, '35. Under the rules their applications lay over for one month.

Dr. C. S. Gorsline, for a special committee, addressed the chair and Dr. M. A. Mortensen with a few remarks. Dr. Stuart Pritchard was called upon to say a few words, then Dr. Gorsline, for the Society, presented Dr. Mortensen with a beautiful electric desk clock, a token from the Calhoun County Medical Society. Dr. Mortensen was given several letters and telegrams from friends throughout the state.

The secretary announced that Dr. Morris Fishbein, Editor of the *Journal of the American Medical Association*, would be in Battle Creek, October 6, speaking at the Annual Convention of Kiwanis. The doctors were invited.

Dr. A. T. Hafford reported the meeting of the House of Delegates at the Michigan State Medical Society meeting at Grand Rapids. The most important action to report is the increase of dues \$2.00 and the action instructing the Society to use every effort in its power to increase the funds of the State Board of Registration in Medicine, to the end that one or more inspectors may be available to round up irregular practitioners.

Dr. Stadle, for the Program Committee, introduced Dr. Stanley Gibson, Professor of Pediatrics, Northwestern University, Chicago, who spoke on "The Diagnosis of Abdominal Conditions in Children."

The discussion was by Drs. A. T. Hafford, Simpson, Collins, of Kalamazoo, Mustard, Bonifer, Becker, Stanley Lowe, and Rosenfeld. Dr. Gibson closed by answering questions.

The meeting adjourned. Attendance at dinner, seventy-four; at meeting, eighty three.

CLINTON COUNTY

T. Y. Ho, M.D.
Secretary

The regular monthly meeting of the Clinton County Medical Society was resumed after suspension of activities during the summer months on October 26, 1937, with Dr. A. C. Henthorn presiding. The opening of the fall meeting is an annual meeting of this Society with election of officers as follows: President, Dr. F. E. Lutton, St. Johns; vice president, Dr. W. B. McWilliams, Maple Rapids; secretary-treasurer, Dr. T. Y. Ho, St. Johns; delegate, Dr. A. C. Henthorn, St. Johns; alternate, Dr. H. D. MacPherson, Fowler.

The Clinton County Medical Society expects and is planning to have a rather active year with the full coöperation of its entire membership. The Society meets every last Tuesday evening of each month from October to June, inclusive, at 7:30 P. M.

EATON COUNTY

THOMAS WILENSKY, M.D.
Secretary

The 1937-38 activities of the Eaton County Medical Society were ushered in at Charlotte on the evening of Thursday, September 23, by a dinner, business session and clinical program.

Following dinner, the meeting was turned over to Dr. Louis J. Hirschman of Detroit, who addressed the society on the subject, "Ano-Rectal Disorders." The essayist was accorded an enthusiastic vote of thanks for his splendid presentation of those vexing and oft-neglected disease entities which have their habitat in the last few inches of the intestinal canal.

A short business meeting was conducted by President H. A. Moyer, during which Dr. M. B. Beckett of the W. K. Kellogg Foundation outlined the hopes and plans of the Foundation for the coming year.

* * *

The October meeting of the Eaton County Medical Society convened at the Carnes Tavern, Charlotte, on the evening of Thursday, the 28th. This meeting drew an exceptionally large attendance, including many obstetrically- and gynecologically-

minded visitors, who were attracted by the speaker, Dr. Channing W. Barrett of Chicago, and his subject, "The Preservation and Restoration of the Function of the Pelvis."

Dr. Barrett was presented to the assembly by Dr. F. W. Sassaman of Charlotte. Aided by many excellent lantern slides, Dr. Barrett described the comparative anatomy, and detailed human anatomy of the pelvic floor in so lucid and understandable a manner as to throw new light upon the function of the muscles and fasciæ under discussion, and the extreme necessity that their integrity be maintained.

After a short recess a business meeting was conducted by President H. A. Moyer. The transfer of Dr. Fred Arner of Bellevue from Washtenaw County Medical Society to the Eaton County Medical Society was duly passed upon and recorded.

It was decided, after considerable discussion, that the November and December meetings should be combined and presented as a dinner and entertainment for the ladies on the evening of December 9.

GENESEE COUNTY

C. W. COLWELL, M.D.

Secretary

The Genesee County Medical Society held its monthly meeting at the Dresden Hotel on October 7, 1937.

Meeting called to order by the president, Dr. Alvin Thompson.

Dr. Thompson introduced Judge F. L. McAvinchey, who spoke briefly on the Afflicted Children's Act. He spoke of the record that Hurley Hospital had with the Crippled Children's Commission, and urged the doctors to cooperate in every way possible to better this condition.

Mr. Hugh E. Vandewalker, chairman of the Commission, was introduced by Dr. Henry Cook, and he spoke briefly on the duties and aims of the Commission.

Dr. Winchester moved that the president appoint a committee of three to confer with Judge McAvinchey on bettering things at Hurley Hospital. Seconded and passed.

Dr. Cook then spoke briefly on the Syphilis Control Program in Genesee County. Dr. Thompson then spoke of his intention of appointing a committee to investigate this program.

HILLSDALE COUNTY

E. G. MCGAVRAN, M.D.

Secretary

The September meeting was held in the Hillsdale Country Club and was called to order by the president, Dr. W. E. Alleger, at 5:00 p. m.

Certain recommendations of the executive committee were brought to the attention of the Society by the president.

The secretary read some interesting letters received by him from township clerks regarding their experience with physicians concerning the reporting of births and deaths. It was emphasized that there was a real need for the complete filling out of such report cards.

The X-ray Committee report was presented by Dr. Bowers. It was moved and seconded that the report of the committee be accepted and that the committee be empowered to continue its work in reorganization of the x-ray department. Approved.

The Laboratory Committee report was presented by Dr. Bowers. After discussion, it was moved and seconded that the report be accepted and that the committee continue its work. Approved. It

was moved and seconded that the need for new laboratory equipment be referred back to the committee for further consideration. Approved.

A short demonstration of the new oxygen apparatus was presented by Dr. Fleming. Two of these sets are at the Hillsdale Hospital and are available for use by the physicians in the patients' homes.

The Maternity Committee report was presented by Dr. Strom. It was moved and seconded that this report be accepted by the Society. Approved.

The secretary then presented the program affecting infant, preschool and school groups and medical remedial services for the following year. It was moved and seconded that the reports on the infant, preschool, school and medical remedial programs be accepted. Approved.

The report of the Program Committee was presented by Dr. Day. Tentative programs for each month have been drawn up, including a combined state society night meeting with the Jackson County Medical Society. It was moved and seconded that the report of the program committee be accepted. Approved.

The Education Committee report was presented by Dr. Hamilton. Five physicians have designated their desire to attend the proposed postgraduate course at McGill University in October and two alternates are available. Details of the state medical society postgraduate courses were presented. A survey of postgraduate work of members of the society, not aided by the Kellogg Foundation, was made. It was moved and seconded that the report of the Education Committee be accepted. Approved.

The report of the Social Hygiene Education Committee was made by Dr. Poppen. It was emphasized that the new law, passed at the urging of the state medical society, puts a definite duty upon licensed physicians in the matter of the teaching of social hygiene. It was moved and seconded that the report of the committee on social hygiene be accepted and that it continue its work. Approved.

The question of pre-marital examination was brought before the meeting by Dr. Strom. In the ensuing discussion it was emphasized that this is an urgent matter and that standards of examination be set up. It was felt, however, that the county should follow the lead of the state society and the delegate to the state society, Dr. Day, was instructed to bring back a report on this matter from the State Society meeting, at the end of this month, to be presented to the next meeting of the society.

The new hospital plans were discussed by Dr. Green. The proposed plan for a modern, fifty-bed hospital on a new site, as yet undetermined, was strongly supported by those present. It was moved and seconded that the report of the Hospital Committee be accepted. Approved.

The business before the meeting having been concluded, it was moved and seconded that the meeting be adjourned. Approved.

INGHAM COUNTY

R. J. HIMMELBERGER, M.D.

Secretary

The monthly meeting of the Ingham County Medical Society was held on October 19, 1937, at the Hotel Olds. Dinner was served to seventy-eight members and six guests.

Following the dinner, the meeting was called to order by the president, Dr. M. S. Shaw.

The applications of Drs. F. M. Dunn, Robert F. Hall, T. A. Lucas, and R. J. McGillicuddy for active membership were read. The applications of

Drs. F. W. Tamblyn, C. M. Watson, Charles F. Holland, and John E. Hinkson for associate membership were read. All were elected to associate membership by ballot.

Dr. L. M. Snyder of the Public Relations Committee reported that radio station WJIM was donating some time to the Medical Society to put on a program consisting of prepared papers to be read by individual members. This will probably start the first week in November.

Dr. George C. Stucky of the Public Health Committee read a report on the advantages of a county health unit, and moved the approval of such a unit, which was adopted.

Dr. H. A. Miller gave a preliminary report on the matter of the telephone exchange. Nothing definite has been arrived at as yet.

Dr. Robert Burhans reported that the Entertainment Committee is planning a Keno party on November 11, which will also be a Bohemian dinner served by the Auxiliary.

Mr. William J. Burns, executive secretary of the Michigan State Medical Society, explained the new uniform Narcotic Drug Act to the members.

There being no further business to come before the meeting, Dr. Shaw introduced Dr. L. M. Snyder, who told of his experiences on his recent European trip. Dr. Snyder exhibited several colored lantern slides taken while on his trip.

JACKSON COUNTY

HORACE WRAY PORTER, M.D.

Secretary

The monthly meeting of the Jackson County Medical Society was held Tuesday evening, October 19. In the absence of Dr. Crowley, due to illness, Dr. John Van Schoick, president-elect, presided at the meeting.

Dr. Van Schoick paid a tribute to Dr. J. C. Kugler and Dr. A. J. Roberts, who were elected Emeritus Members of the Michigan State Medical Society at the recent meeting in Grand Rapids. Both of the gentlemen responded briefly. It was reported that the names of Dr. Dean C. Smith and Dr. A. H. Keefer, the latter practicing in Concord, had been presented for membership in this society, had been favorably acted upon by both the board of directors and the membership committee and would become regular members at the November meeting.

The following new members of the medical profession were introduced at this meeting: Dr. J. L. Hoernschemeyer, who is the assistant of Dr. Huntley at the Southern Michigan Prison, coming here from Bay City, and Dr. Grant Otis of Madison, Wisconsin, who was introduced by Dr. A. M. Schaeffer, with whom he is to be associated. These men will both make application to become active members.

The secretary called the attention of the membership to the new antenuptial law and the occupational disease law, both of which go into effect October 29, 1937. It is necessary after that date for every physician who sees any occupational disease coming under the meaning of the law to report it to the Michigan State Board of Health. The members were also advised that under a recent ruling it will be necessary to procure a narcotic license from the State of Michigan for a fee of \$1 in addition to the former government license at the same fee.

Dr. Riley explained in some detail the antenuptial law. Although the blanks include only space for

stating whether or not the applicants for a marriage license have syphilis, gonorrhea or chancroid, it was the intention of the makers of the law to have it include a rather careful physical examination. The general concept is that all that needs to be done is to take blood for a Kahn or Wassermann test and to make a smear, where indicated, for gonorrhea. Under the present ruling there is no provision made for its application to Wassermann-fast cases.

An excellent point about the law, mentioned by the discussant, is that the appearance of the patient for this examination before marriage may stimulate him or her to have an examination annually on this anniversary. Furthermore it is urged that the plan of the law, namely, to have a general examination, be carried out because many unsuspected serious conditions might be discovered such as hypertension, four plus albumin, etc.

The matter of the recent newspaper publicity regarding the deaths in Oklahoma due to elixir of sulfanilamid was discussed.

The meeting was then turned over to Dr. Clarke, entertainment chairman of the evening, who asked Dr. John Van Schoick to introduce Dr. Arthur W. Strom of Hillsdale, with whom he had recently spent two weeks in postgraduate work at McGill University in Montreal. Dr. Van Schoick and Dr. Strom were two of a group of five who were offered this trip as members of the Hillsdale County Medical Society with all necessary expenses paid by the W. K. Kellogg foundation.

Dr. Strom first gave a brief history of McGill University since its first establishment as a medical school to which other departments were subsequently added. He stated that this group is the first to be given postgraduate instructions at that institution and, in spite of this, their reception by the medical faculty was very cordial and nothing was left undone to make the visit of value from an educational standpoint or pleasant from a social standpoint.

KALAMAZOO-VAN BUREN COUNTY

LOUIS W. GERSTNER, M.D.

Secretary

The regular monthly meeting of the Kalamazoo Academy of Medicine was held October 19, 1937, at 7:30 P.M. in the Academy rooms.

The meeting was called to order by the President, Dr. Wm. Hoebeke.

Dr. Crum, in reporting for the committee in charge of the Crane Memorial Fund, suggested that Dr. Crane's biography as prepared by Dr. Huyser be read at the annual meeting and that henceforth one meeting a year be designated as the Crane Memorial meeting. Dr. Bennett moved that these suggestions be carried out. Carried.

The application for membership of Dr. Howard Lavender was read the second time. Dr. Lavender was unanimously elected to membership.

Applications for transfer of membership to the Kalamazoo Academy of Medicine by Drs. Floyd Boys, J. C. Volderauer, William A. Scott and Carl Wagar were unanimously accepted.

The applications for membership of Drs. Edwin Terwilliger and Keith Bennett were read for the first time.

Dr. Brown introduced Clare Gates, Dr. P.H., field secretary of the joint committee on health education, who explained the working of the radio programs sponsored by the state society.

The business meeting adjourned.

NORTHERN MICHIGAN

GILBERT B. SALTONSTALL, M.D.

Secretary

The regular meeting of the Northern Michigan Medical Society was held in the Cedar Room, Hotel Perry, Petoskey, Thursday, September 9, 1937. There were ten regular members present and two guests, Dr. Frank E. Hamilton, Columbus, Ohio, and Mr. Rudolph Lang. After dinner the meeting was called to order by Vice President Grillett. Correspondence was read and placed on file. Special announcements of the State Medical meeting and the fall Post-Graduate Lectures were made. The Vice President appointed an entertainment committee for the Petoskey post-graduate meetings consisting of Drs. Mast, Engle and Saltonstall. Dr. Dean discussed and explained the new Tuberculosis Laws for the benefit of those present. The remainder of the program was presented by Dr. George W. Nihart, who spoke on "Medical History and Progress in Northern Michigan." It was voted to dispense with the October meeting, which coincided with the date for the first post-graduate lecture in Petoskey on October 15.

The meeting adjourned at 8:30 P. M.

OAKLAND COUNTY

O. O. BECK, M.D.

Secretary

The October meeting of the Oakland County Medical Society was held at the Forest Lake Country Club, Square Lake and Telegraph Roads, on Wednesday, October 6. Claire L. Straith, M.D., was the speaker.

He talked on the accident problem as it concerns his specialty with particular emphasis on the prevention of conspicuous deformity. Dr. Straith had some interesting ideas regarding the personality changes that are a result of deformities. Many of these patients develop serious psychic changes and the prevention of these personality changes can be brought about by proper treatment of the deformities. The talk was illustrated by slides and motion pictures, and altogether the evening was long to be remembered.

ST. CLAIR COUNTY

G. M. KESL, M.D.

Secretary

A regular meeting of Saint Clair County Medical Society was held at the Harrington Hotel, Port Huron, Tuesday, October 19, 1937. Supper was served to twenty-five, after which the meeting was called to order by President-Elect Macpherson with thirty members and guests present.

The Chair brought up the question of professional service in connection with the new law requiring freedom from venereal disease prior to the issuance of a marriage license. Dr. George Waters spoke briefly on the subject. At the request of the Chair the Secretary read the list of major provisions of the law. Dr. Heavenrich said he had talked with The State Health Commissioner and that the State expected honest cooperation from the reputable members of the medical profession and would prosecute those who circumvented the provisions of the law. Dr. DeGurse brought up the question of the legality of a physician divulging certain facts even to the County Clerk or other officials and expressed

the opinion the law was not constitutional. Dr. Patterson and Dr. Reginald Smith likewise discussed the matter. Two motions were adopted by the Society: one relative to a maximum fee for the examination and the other placing the Society on record that all female applicants be given a vaginal examination.

Dr. Stewart F. Meek addressed the meeting on "Pending Changes in Industrial Medicine and Surgery." After a discussion, the meeting adjourned when the Chair thanked Dr. Meek for coming up from Detroit and giving such a fine talk.

WASHTENAW COUNTY

L. J. JOHNSON, M.D.

Secretary

The Washtenaw County Medical Society held its regular meeting at the Michigan Union on October 12, 1937. Forty-nine members were present.

President Nesbit presided.

Notice was read by the Secretary that the dues for new members had been reduced to \$6.50 if applications were received after July 1, 1937.

Transfer of membership from the Montgomery County Medical Society, Dayton, Ohio, for Dr. H. W. Harris was accepted and he was declared a member.

The Censor Committee presented applications from Doctors Ralph M. Stuck, Joseph P. Belsley, L. Yglesias, and Cameron Haight. These were passed upon favorably by the Society and were accepted as new members.

President Nesbit reported that the Filter Board was working very well and commended the excellent support given it by the Members of this Society.

Dr. Nesbit introduced Dr. C. Leslie Mitchell, Surgeon in Charge of the Division of Orthopedic Surgery, Henry Ford Hospital, who presented a paper on "Back Pain."

Dr. Mitchell presented lantern slides clearly demonstrating all forms of deformity, both of the lumbo-sacral union and in the alignment of the lumbar spine. These demonstrated particularly the reduction in the size of the foramen and the changes in the disc.

Dr. Badgley discussed the paper.

The meeting adjourned at eight o'clock P. M.

COUNTY SECRETARIES CONFERENCE

Lansing, January 23, 1938

Hotel Olds, 10:00 A. M. to 4:00 P. M.

Secretaries, Presidents, other officers
and members of county medical
societies are cordially invited.

WOMAN'S AUXILIARY

CHRISTMAS GREETINGS

THROUGH your humble servant the Auxiliary voices appreciation of this privilege and the confidence bestowed by the State Society through its worthy Editor in the request for a Christmas message.

In behalf of the Auxiliary we thank you.

We are grateful also for this opportunity to express our gratitude to our predecessors, especially the Executive Board of the past year, in the "foundations laid and paths made straight" for present incumbents. At this season of the year our hearts are warm with the unfailing promises that began with the Christian era. And what a glowing light it throws upon the value of personality.

One could ponder at length over the glory of the babe in the midst. But as the season approaches let us face this solemn fact: *we* are what makes the universe worth while to God. Personality is the gem, the universe the setting. Hence through this humble effort do we honor our Medical Society who through the science of medicine major on *folks* first, not things; and who daily and hourly are bringing to fruition things seen "not through a glass darkly, but face to face."

Thus it follows closely that opportunity awaits in a greater realm than ever before in the all-important task for the Auxiliary to help disseminate truths from the Medical Society.

'Tis not a question as to whether or not we are successful, but whether we have done our best. We thank you for the encouragement and coöperation already extended and the assurance of its continuance.

Let us forget neither the *gem* nor the *universe*.

May the joys of the season abide throughout the year to the all-inclusive membership of the State Society and the Woman's Auxiliary.

With Tiny Tim we say, "God bless you every one."

(MRS. C. B.) CORA K. FULKERSON

State Press Chairman

Dear Auxiliary Members:

Your Secretary-Treasurer does not need to be psychoanalyzed to know that for this year, at least, she has a dual personality. Let the Secretary speak first. At the post-convention board meeting, one item of interest to all program builders of county auxiliaries was entered into the minutes and is repeated here:

"National headquarters stands ready to send out program material on request. A list of suitable speakers available in Michigan can be obtained by writing to Mr. William Burns, Executive Secretary M.S.M.S., Olds Tower, Lansing."



MRS. J. W. PAGE
State Secretary-Treasurer

Your President attended the board meeting of the National Auxiliary in Chicago, November 19. Following that, she is calling the mid-winter meeting of the State Board at the Hayes Hotel, Jackson, December 6, at 12:15. Dr. Philip Riley, of Jackson, will speak at the luncheon.

And now the Treasurer speaks. In order that our work of organization and promotion of common objectives may go forward, it is necessary that there be funds in the State and National treasuries with which to operate. During the depression, these funds were depleted and our activities crippled. Happily, that period is passed and now we hope that each member will feel the necessity of paying promptly the full assessment of \$0.75 to the State treasury and \$0.25 to the National, in addition to the local dues. Local Treasurers should have this money in the hands of the State Treasurer by March 3, 1938. Remember, the deadline on State dues is March 3.

As soon as supplies come from the National office, the County Treasurers will be furnished the blanks on which to record remittances and the cards from which we hope to build a complete card index of our members. Until then, Treasurers, provide yourselves with a receipt book, since this is not a part of the supplies furnished, and proceed to the collection of dues. The State officers will appreciate highly your coöperation in this matter of getting

WOMAN'S AUXILIARY

our dues in promptly so that we may retain our good record with the National Auxiliary.

Cordially yours,
(MRS. J. W.) ETHEL BOYD PAGE
State Secretary-Treasurer

* * *

Dear Auxiliary Members:

It is the request of the National Committee on Program or Health Education that each Auxiliary schedule at least one program for Health Education. With our children always foremost in our mind, the subject *Correct Child Guidance in the Home* would interest many of us. This subject pertains to health more than we might realize. We parents are constantly planning for happy children and homes; but to achieve this, good sound health is essential. The child who is happy in school and with his companions is the healthy child. To be healthy he needs correct food eaten under favorable conditions. What is more conducive to good digestion than a dinner table thoughtfully and carefully conducted with joyful, well guided conversation?

What about adequate sleep? A big subject.

Of course, we must consider sound health habits.

As our children grow older we visit with them about their vocational ideas—frequently around the dinner table. I often think what a happy, healthy world this would be if everyone found his correct vocation.

Now our children are grown. Assuming that they have had adequate medical care, I ask this question, "Have we made every effort to give them a healthy mind and body?"

Please remember, Program Chairmen, that I am expecting a report from you as soon as your programs are completed.

Sincerely yours,
MRS. ROBERT JAENICHEN
State Program Chairman

* * *

The American Medical Association is playing Santa Claus again this year by giving us an opportunity to raise our *Hygeia* quota and win a \$50.00 prize. \$150.00 in prizes are being donated by our Woman's Auxiliary Contest as follows:

Group I —Auxiliaries with membership 1-49	} \$50.00
Group II —Auxiliaries with membership 50-199	
Group III—Auxiliaries with membership over 200	
	Cash
	Each

Each group prize will be based on your quota and the number of subscription credits secured. Your quota is the number of paid up members in your Auxiliary at the close of the fiscal year for 1936.

A new or renewal one-year subscription will count as one credit; a two-year subscription as two credits; a six-months subscription as one-half credit. In event of a tie, the county sending the largest number of two- and three-year subscriptions will be awarded the prize.

Now will all county *Hygeia* chairmen work ardently through December for the subscriptions from members of the American Medical Association (physicians only) at half price? That's something you should really get enthusiastic about.

And remember that the *Hygeia* Chairman of each Auxiliary keeps her receipts until the close of the contest to check with the *Hygeia* subscription department. Call on every physician in December, and luck to you; in behalf of the state *Hygeia* chairman, Mrs. L. R. Keagle, Battle Creek.

We regret the demise on October 20 of one of our faithful members, Mrs. John Newell Holcomb, Grand Rapids. The Auxiliary extends sincere sympathy to Dr. Holcomb and his son, Dr. John Winslow Holcomb.

* * *

NOTE—Hereafter all material must be in the hands of the State Press chairman by the 10th of the month to coöperate with the Editor's request.

Calhoun County

In June the Woman's Auxiliary of the Calhoun County Medical Society sent corsages to the Nichols and Leila Hospital graduating nurses.

At the August meeting the president, Mrs. W. L. Howard, presented the list of the committee chairmen, as follows:

Hospitality—Mrs. M. J. Capron
Program—Mrs. H. F. Becker
Membership—Mrs. W. O. Upson
Sewing—Mrs. C. W. Royer
Ways and Means—Mrs. W. R. Chynoweth
Hygeia—Mrs. L. R. Keagle
Publicity—Mrs. K. H. Lowe
Notification—Mrs. N. O. Byland

The October meeting was held, as usual, on the first Tuesday of the month at the Marywood Country Club. After dinner Mrs. W. L. Howard and Mrs. Carl Wencke, delegates to the State Convention, gave their reports which were very interesting.

Mrs. A. M. Giddings, on behalf of the Auxiliary, presented a corsage to Mrs. M. A. Mortensen, who is leaving soon with Dr. Mortensen to make her home in California. We are indeed sorry to lose her.

Mrs. Robert Fraser introduced Mrs. Stuart Pritchard, who gave a very interesting talk, accompanied by motion pictures taken on her recent trip to England and the Continent, including Coronation pictures. It was all most enjoyable to the large crowd of members and guests.

The November meeting was held at a 6:30 dinner at the Kellogg Hotel. The Treasurer's report showed a balance of \$410.70. Mrs. L. R. Keagle gave a short report on her work with *Hygeia*, and it was voted to buy fifty subscriptions and let Mrs. Keagle allocate them in schools, doctors' offices, or libraries, as she wishes. Mrs. Bergein Overholt, just returned from Europe, gave a travelogue and The Reverend Carleton Brooks Miller gave a much appreciated review of the book, "The Art of Ministering to the Sick" by Doctors Dicks and Cabot, of Massachusetts General Hospital, showing the teamwork of the man of medicine and the man of religion. As a token of appreciation the Auxiliary presented Mr. Miller with a copy of the book "The Nile" by Emil Ludwig.

—ALICE OVERHOLT, *Secretary*.

Ingham County

The first meeting of the Auxiliary to the Medical Society of Ingham County was held on October 11 at the Union Memorial Building, Michigan State College, East Lansing. Luncheon was served at one o'clock at attractively decorated tables. Mrs. M. C. Loree and Mrs. H. C. Rockwell had charge of arrangements. Mrs. C. P. Doyle, program chairman, gave a brief account of the program for the coming year. Mrs. Frank Stiles, chairman of the sewing committee, announced plans for sewing at St. Lawrence Hospital and for the Children's Home. Mrs. C. F. DeVries gave a report of the State Auxiliary meeting at Grand Rapids.

About 200 attended the Bohemian dinner at which the Ingham County Auxiliary entertained the

members of the Ingham County Medical Society on Thursday, November 11. The dinner was held at the Episcopal Guild Hall. A saxophone quartet entertained after dinner and keno was played. The committee in charge of the dinner was made up of Mrs. M. C. Loree, chairman, Mrs. C. F. DeVries, Mrs. Guy Kiefer, Mrs. Howard Rockwell, Mrs. A. E. Owen, Mrs. Fred Drolett, Mrs. Fred Huntley, Mrs. Howard Haynes, Mrs. Wm. McNamara, Mrs. O. M. Randall and Mrs. T. P. VanderZalm.

On November 14, the Ingham County Auxiliary participated in the Red Cross drive by taking over a large section of the city and making a house to house canvass. Mrs. H. A. Wiley was the major in charge of this activity and was assisted by three captains and fifteen workers from the Auxiliary.

The Auxiliary to the Medical Society of Ingham County will sponsor a lecture on "Popular Beliefs That Are Not So," by Dr. W. W. Bauer of Chicago, Director of Health and Public Instruction of the American Medical Association, and Associate Editor of *Hygeia*, *The Health Magazine*, published by the American Medical Association. The lecture will be held at Eastern High School Auditorium on Tuesday, November 30, at 8 P. M. The Publicity Committee has been working, getting announcements, posters and tickets ready for this event. The Publicity Committee consists of Mrs. P. C. Strauss, chairman, Mrs. R. S. Breakey, Mrs. H. L. French, Mrs. H. J. Prall and Mrs. C. B. Gardner.

MRS. P. C. STRAUSS
Publicity Chairman

Jackson County

Officers of the Jackson County Auxiliary for the present year are: President, Mrs. J. E. Ludwick; vice president, Mrs. R. H. Alter; secretary, Mrs. John Scott, treasurer, Mrs. W. W. Lathrop.

Committee chairmen have been appointed as follows:

Membership—Mrs. G. R. Bullen
Flower—Mrs. Don Kudner
Program—Mrs. John Page
Legislative—Mrs. T. Cox
Social—Mrs. E. T. Lewis
Public Relations—Mrs. T. E. Hackett
Press and Publicity—Mrs. A. M. Shaeffer
Medical Reporter—Mrs. Morris Wertenberger
Hygeia—Mrs. Norman Wilson
Telephone—Mrs. Convin Clark
Ways and Means—Mrs. W. H. Enders
Advisory—Dr. Rex Bullen.

The first fall meeting was devoted to honoring Mrs. Glen Hicks, newly elected president of the Woman's Auxiliary to the Michigan State Medical Society, when Mrs. John Ludwick opened her home on October 19. The occasion took the form of a membership tea, and the wives of every member of the County Medical Association were invited. Mrs. Ludwick, who is the president of the County Auxiliary, was assisted by the Membership Committee and the Social Committee of the Auxiliary.

Tea was served from a lace-covered table, centered with baby mums and rose-buds, and lighted by candles in crystal holders. Presiding at the tea table were Mrs. L. J. Harris, a former president of the State Auxiliary, Mrs. E. S. Peterson, former State Chairman of Legislation, Mrs. John Smith and Mrs. Horatio Brown. The guest of honor, the hostess, and those who poured, were presented with corsages by the local Auxiliary.

During the afternoon, Miss Lillian Treadwell, violinist, and Miss Virginia Crall, pianist, occupied the music room and delighted the guests with a series of pleasing numbers.

—MRS. A. M. SHAEFFER, *Press Chairman*.

Kalamazoo Academy

The Women's Auxiliary to the Kalamazoo Academy of Medicine held their first regular meeting following the summer recess at the home of Mrs. Hugo Aach on October 19.

A bountiful coöperative dinner was served at 6:30 to twenty-nine members and five guests.

Mrs. I. W. Brown, vice president, presided over the business meeting.

Mrs. Brown mentioned that our Auxiliary should feel honored in having two of its members on the State Board, Mrs. F. T. Andrews and Mrs. C. B. Fulkerson. Mrs. Fulkerson briefly outlined her duties as State Press Chairman.

The following committee chairmen were named:

Program and Social—Mrs. Kenneth Crawford
Legislation—Mrs. F. T. Andrews
Hygeia—Mrs. S. E. Andrews
Publicity—Mrs. Hugo Aach
Membership—Mrs. C. E. Boys
Public Relations—Mrs. Walter Den Bleyker
Calling—Mrs. Ralph Cook
Advisory Council—Mrs. Rush McNair, Clarke B. Fulkerson and Sherman Gregg.

The evening was spent informally, playing bridge and sewing.

—(MRS. HUGO) BARBARA K. AACH,
Publicity Chairman

Kent County

Officers of the Women's Auxiliary to the Kent County Medical Society for 1937-1938 are: President, Mrs. Carl Snapp; president-elect, Mrs. P. L. Thompson; vice president, Mrs. Kenneth Fellows; corresponding secretary, Mrs. L. M. McKinlay; recording secretary, Mrs. O. H. Gillett; treasurer, Mrs. H. C. Robinson.

Committee chairmen have been appointed as follows:

Membership—Mrs. Merrill Wells
Program—Mrs. V. M. Moore
Social—Mrs. M. W. Shellman
Courtesy—Mrs. T. R. Kemmer
Hygeia Magazine—Mrs. W. J. Butler
Legislation—Mrs. A. V. Wenger
Revision—Mrs. Leon De Vel
Philanthropic and Welfare—Mrs. John M. Whalen
Public Relations—Mrs. Torrence Reed
Press—Mrs. Robert Eaton
Historian—Mrs. A. V. Wenger

The fall meeting was held Wednesday, October thirteenth at 2:30 in the Medical Arts Club Rooms, Grand Rapids. Senator Earl W. Munshaw, as guest speaker, gave an excellent address on "The Legal Side of Medicine." Mrs. Charles V. Crane and Mrs. Christian Krupp were in charge of the tea which followed the address, with Mrs. Carl Snapp and Mrs. P. L. Thompson, president and president-elect, at the tea urns.

On October 30 the Auxiliary made \$107.00 at a rummage sale. Mrs. William Butler, chairman of the Hygeia Committee, and Mrs. John Whalen, chairman of the Philanthropic Committee, were in charge. The proceeds are to go to the work of the two committees.

At the afternoon meeting, November 10, the auxiliary heard Mrs. Cora Storrs Clark speak on "Interior Decorating." Plans for a benefit party to be held December 6 in the Fine Arts Building were discussed. Mrs. William Butler is general chairman of arrangements, assisted by Mrs. John M. Whalen. Proceeds of the bridge will be used to defray expenses of putting six-month subscriptions to *Hygeia* in 172 Kent County rural schools. Mrs. P. W. Bloxson and Mrs. J. C. Foshee were in charge of the tea which followed the meeting.

—(MRS. ROBERT) MIRIAM ADAMS EATON
Press Chairman.

(Continued on page 1002)

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Saginaw County

More than forty members of the Saginaw County Medical Auxiliary attended the luncheon at the Zehnder Hotel, Frankenmuth, November 19. Luncheon was served at one o'clock. The table was effectively decorated with bronze and yellow chrysanthemums and yellow tapers. Year books, the auxiliary calendar, marked each place.

After a most delicious luncheon, a short business meeting was held with the president, Mrs. L. C. Harvie, presiding. Interesting reports were given by Mrs. J. A. McLandress, Hygeia chairman, and Mrs. L. A. Campbell, legislative chairman.

The members then adjourned to the lovely new home of Mrs. Clemens J. Kirchgeorg, Frankenmuth, for the social hour. Bridge was enjoyed, prizes going to Mrs. Milton G. Butler and Mrs. Cecil W. Ely.

The next meeting will be held at the Y.M.C.A., Saginaw, December 9, where the auxiliary will entertain the Medical Society at a Pot-luck dinner and Feather Party.

HOW TO PREVENT THE FLU

I notice that the papers say
That milk will keep the 'flu at bay,
And he who swigs his pint (or quart?)
Will ail from nothing of that sort.
And I have also heard it said
That influenza microbes dread
Swipes that are much less mild than that—
For there are those who tell you flat,
And with an emphasis terrific,
That whisky is the grand specific.
Others assert, and to it stick,
That orange juice will do the trick;
And obviously it must be true
That vitamins prevent the 'flu,
For vitamins both should and can
Thwart every ailment known to man.
The calorie in this connection
No doubt affords secure protection.
Fresh fruit is also recommended,
And artificial sunlight splendid;
And when you've taken all the rest,
It may be true that beer is best.

There should be also borne in mind
The various bottles that we find
Displayed within the chemist's shop
For keeping 'flu germs on the hop.
Tonics there are to keep you fit;
No bug would dare to do its bit

Against a human braced with those
To meet the worst of 'flu germ foes.
Or, if some bug should dare to bite
Before you've got your system right,
Are there not dopes designed as cures
Before the full attack matures?

How odd it seems, with all these aids,
That 'flu still makes its frequent raids!
Cures and preventives all around—
And yet we still see people downed!
Bearing in mind how mortals might
(As just explained) avoid this blight,
Strange is the truth, as here we strike it—
They must have 'flu because they like it!

—Manchester Guardian.

MICHIGAN'S DEPARTMENT
OF HEALTH

C. C. SLEMONS, M.D., Dr.P.H., Commissioner
LANSING, MICHIGAN

MONTHLY INCIDENCE OF
COMMUNICABLE DISEASE

The medical profession as well as the public have, during the last decade, come to think of diphtheria as a vanishing disease. In making the statement that diphtheria is no longer decreasing but, on the contrary, is on the increase, some explanation may be necessary or there may be queries as to whether diphtheria immunization is as effective as public health authorities have led others to believe. A careful analysis of diphtheria cases indicates that immunization has been effective but that cases in large part have occurred among those never having received any immunizing treatments. The increase appears to be due to one of those natural phenomena which are responsible for cycles in the incidence, a period of increase and decrease occurring every eight to twelve years. However, this increase has not yet become apparent in other northern states. The time has not yet come when the incidence may be expected to reach its seasonal peak.

Practicing physicians everywhere should be on the alert for diphtheria. Every case which is in any way clinically suspicious of diphtheria should be given antitoxin, due precautions being taken of course with regard to horse protein sensitivity. Throat swabs should then be sent to the laboratory for culture. Not always should prophylactic antitoxin be given to all contacts. It should depend upon age and whether there is a history of previous immunizing treatments. The health officer is familiar with the best practice in this regard and is available for consultation when desired.

Scarlet fever, after showing an unusually high incidence during the seasons of last winter and spring, again starts this fall considerably above the usual prevalence for the season. Many cases of scarlet fever streptococcic infection which fail to show a typical scarlet rash when seen by a physician continue to furnish many sources of infection. Physicians are asked to be on the alert for such cases and to report them to the health officer as suspicious if a definite diagnosis cannot be established, so that arrangements may be made for at least a period of isolation.

Typhoid fever and poliomyelitis seasons are now a thing of the past for another year. The incidence of typhoid has run along very much in accord with the declining rate shown in recent years. Poliomyelitis has attracted a great deal of news paper publicity and the fear of the public has been more than usually excited. The number of cases will exceed those for last year, which was a quite low year, but will probably be lower than the number reported two years ago.

Although the hunting season is nearly over, the time when cases of tularemia will be coming to the doctor is not altogether behind us. Some of these cases may now be going to doctors who, if they have not been thinking of tularemia, may make a mistake in diagnosis. Remember the disease when considering any undiagnosed or enlarged lymph glands and a history of a single initial lesion occurring most often on the hands.

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- Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154 ☐
- N. Y. State Jour. Med., June 1935, Vol. 35, No. 11 ☐
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SEVENTEENTH ANNUAL PUBLIC HEALTH CONFERENCE

Syphilis control, mental hygiene, goiter prevention, maternal hygiene, dentistry in public health, school nursing, communicable disease control, and the relation of the health professions to community health were featured topics on the program of the Seventeenth Annual Michigan Public Health Conference held in Lansing, November 10, 11, and 12. More than a thousand members of the health professions of Michigan attended the three-day conference sponsored jointly by the Michigan Department of Health and the Michigan Public Health Association.

Dr. Roy D. McClure, surgeon-in-chief, Detroit Henry Ford Hospital, addressed the opening session on "The Effect of Iodized Salt Upon Incidence of Operations for Goiter in Southern Michigan." Dr. John R. Heller, Jr., of the United States Public Health Service, discussed "Some Essentials of a Syphilis Control Program." "Michigan's Plans for Syphilis Control" were outlined by Dr. C. C. Slemmons, state health commissioner.

Dr. Haven Emerson of Columbia University spoke on "Education in Maternity Essential to Public Health." Other speakers included Dr. Frank C. Cady, dental consultant, U. S. Public Health Service; Mary Ella Chayer, R.N., assistant professor of nursing education, Columbia University; Dr. Allan J. McLaughlin, University of Michigan; and Arthur E. Gorman, water purification engineer of the Department of Public Works, Chicago.

An interesting feature of the conference was the symposium on "The Health Professions and Community Health," presided over by Dr. James D. Bruce, vice president and director of the Department of Postgraduate Medicine, University of Michigan. Speakers in addition to Mr. Gorman included Dr. A. C. Furstenberg, dean of the University Medical School; Prof. Howard B. Lewis, director of the University College of Pharmacy; Dr. Russell W. Bunting, dean of the University Dental School; Dr. John Sundwall, director of the University Division of Hygiene and Public Health; and Louise Knapp, R.N., professor of public health nursing, Wayne University.

A dedication banquet was sponsored by the Michigan Branch, Society of American Bacteriologists, and the directors of registered laboratories in Michigan, commemorating the completion of the new \$250,000 diagnostic laboratory of the Michigan Department of Health. The banquet address was given by Dr. Frederick G. Novy, M.D., Dean Emeritus of the Medical School and Professor Emeritus of Bacteriology, University of Michigan. It was just fifty years ago that the first Michigan State Laboratory of Hygiene was founded at Ann Arbor as the predecessor of the present half million-dollar state public health laboratory system—and it was Dr. Novy, then "Mr. Novy," who assisted Dr. Victor G. Vaughan in that initial adventure in investigating the "causation and nature of disease."

The speeches given at the conference are being reprinted in *Michigan Public Health*, the monthly bulletin of the Michigan Department of Health. The bulletin may be obtained free of charge upon request.

LABORATORY TESTS FOR PREMARITAL EXAMINATION

In addition to the laboratories listed in the October *Journal*, the following private laboratories were registered by the Michigan Department of Health on November 1 to perform serodiagnostic tests for

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syphilis and microscopy in diphtheria, tuberculosis and gonococcic infections:

Emma L. Bixby Hospital, Adrian; General Hospital, Bay City; Trinity Hospital, Detroit Osteopathic Hospital and Michigan Bell Telephone Company Laboratory, Detroit; Sullivan Laboratory and Zimmerman Laboratory, Flint; St. Francis Hospital, Hamtramck; Michigan Home and Training School, Lapeer; Morgan Heights Sanatorium, Marquette; Hackley Hospital, Muskegon; Memorial Hospital, Owosso; St. Joseph Mercy Hospital, Pontiac; City Hospital, South Haven; St. Joseph Sanitarium, St. Joseph; and Ypsilanti State Hospital, Ypsilanti.

Laboratories, in addition to those in the October listing, which have qualified for microscopy in diphtheria, tuberculosis and gonococcic infections include the Hayes Green Memorial Hospital, Charlotte; H. R. Weidner, Coldwater; and Nottingham Clinical Laboratory, Grosse Pointe Park.

All three of the Michigan Department of Health laboratories at Lansing, Grand Rapids and Houghton are performing, free of charge, the tests required under the antenuptial physical examination law. In filling out the laboratory blanks accompanying specimens, physicians are again urged to give all required data, including the purpose for which the test is to be made; i.e., For Marriage License, For Diagnosis, or For Control of Treatment. Physicians using the old blanks should indicate the purpose for which the test is to be made in writing on the face of the blank.

HEALTH ORGANIZATION IN NORTHERN MICHIGAN

The development of full-time local health departments in Northern Michigan has gone forward rapidly during the past year and a half with the aid of federal funds granted to the Michigan Department of Health under the Social Security Act. Since the spring of 1936, seventeen counties in this area with a combined population of almost 400,000 persons have voted to establish county or district health departments.

Today, north of the Muskegon-Bay City dividing line between industrial and rural Michigan, 90 per cent of the forty-eight counties are provided with health departments staffed by full-time, trained personnel. Only Marquette and Gogebic counties in the Upper Peninsula and Grand Traverse, Leelanau and Benzie in the northern part of the Lower Peninsula do not yet have full time health departments.

Counties which have recently formed either single county or district health departments include Alger, Schoolcraft, Bay, Chippewa, Delta, Dickinson, Houghton, Keweenaw, Iron, Mason, Manistee, Mecosta, Osceola, Menominee, Ontonagon, Baraga and Sanilac.

Organization of these new departments has been made possible through national, state and local co-operation. In addition to the county appropriations, funds have been available from the U. S. Public Health Service under the provisions of the Social Security Act and from the state subsidy of \$3,000 made annually to such departments. The Children's Fund of Michigan has also made extensive contributions, spending more than \$100,000 for this purpose last year.

Once a county health department has been established in Michigan, the citizens of that county have never voted to abolish it. Every one of the fifty-six counties, comprising 55 per cent of the rural population of the state, has maintained its health department since the date it was first organized.

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**PUBLIC WATER SUPPLIES
AND TYPHOID**

Not one case of typhoid fever was caused by any public water supply in Michigan during the past year, according to the report of the Bureau of Engineering. During the same period the state experienced an unprecedented development of safe public water supplies in many communities.

New filtration plants were reported under construction or completed during the past year at Muskegon, Big Rapids, Ann Arbor, Owosso, Pinconning, Algonac, New Baltimore and Marine City.

Public water supply systems were established for the first time at Williamston, Clifford, Grass Lake, Grand Blanc, Eagle Harbor, Deerfield, Palmer, Peck, Tawas City and Elsie. Lake City and Pointe Aux Barque protected their supply with new chlorination equipment. New and more adequate sources of supply were provided at Amasa, Houghton, Hancock, Kalkaska and Kingsley. North Muskegon arranged to receive its water supply from the new Muskegon plant.

The Bureau of Engineering reported a total of 339 public water systems in Michigan, serving a population of 3,554,499 persons. Thus, 74 per cent of the total population of the state is being provided with safe water inspected and approved by the Michigan Department of Health.

**POSTGRADUATE EDUCATION
FOR NURSES**

A series of postgraduate institutes for nurses is being sponsored in Michigan at five selected centers starting the week of November 29 and continuing through December 18, under the auspices of the Michigan State Nurses Association. With the financial assistance of the Michigan Department of Health, the association has secured Miss Anita M. Jones of Maternity Center, New York, to conduct the institutes.

The institutes will be held for three days each at Traverse City, Grand Rapids, Kalamazoo, Flint and Bay City. The topic of the institutes, "Nursing Service in the Maternity Program," will prove of interest to private duty, institutional and public health nurses. Meetings will be open to members of the association as well as to non-member graduate nurses.

CORRESPONDENCE**ON MEDICAL SPECIALTIES**

To the Editor,

JOURNAL, MICHIGAN STATE MEDICAL SOCIETY:

The Advisory Board for Medical Specialties adopted the following resolution at its meeting in Atlantic City, on June 6, 1937:

RESOLVED, That the President appoint four members of the Advisory Board for Medical Specialties with power to add to their number and to form a Commission on Graduate Medical Education to study the problems of graduate and postgraduate medical training such a Commission to be comprised of representatives of the medical profession, the hospitals, the universities, the medical schools, and the licensing bodies.

In keeping with that action, may I report that a Commission on Graduate Medical Education has been created, the personnel of which is attached.

The commission will undertake to mobilize cur-

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rent opinions as to how the problems in this field can best be solved and to formulate the educational principles involved in graduate and postgraduate medical training. It is hoped that standards of training can be drawn up which will be of help to the Council on Medical Education and Hospitals, and other agencies concerned with the inspection and evaluation of the facilities needed. There would be no duplication of effort nor conflict with the Council and these other agencies. The results of the studies by the Commission should be of real assistance to the specialty boards, the medical profession, hospitals, medical schools, state boards of medical examiners, and other institutions and organizations concerned with this phase of American medicine.

Sincerely yours,
WILLARD C. RAPPLEYE, M.D.,
President.

Commission on Graduate Medical Education

- Fred L. Adair.....Chicago
Vice President, American Board of Obstetrics and Gynecology.
- A. C. Bachmeyer.....Chicago
Director, University of Chicago Clinics; Former President, American Hospital Association.
- Donald C. Balfour.....Rochester
Director, Mayo Foundation; Member, Board of Regents, American College of Surgeons.
- Kenneth D. Blackfan.....Boston
Professor of Pediatrics, Harvard Medical School.
- James D. Bruce.....Ann Arbor
Vice President and Director of Department of Postgraduate Medicine, University of Michigan; Chairman, National Committee on Postgraduate Medical Training.
- R. C. Buerki.....Madison
Superintendent, University of Wisconsin Hospital; Former President, American Hospital Association.

- Anton J. Carlson.....Chicago
Professor of Physiology, University of Chicago.
- Walter F. Donaldson.....Pittsburgh
Secretary, Pennsylvania State Medical Society, and former member of Council on Medical Education and Hospitals of American Medical Association.
- Reginald Fitz.....Boston
Member, American Board of Internal Medicine; Member, Council on Medical Education and Hospitals.
- Evarts A. Graham.....St. Louis
Chairman, American Board of Surgery.
- F. W. Hartman.....Detroit
Secretary-Treasurer, American Board of Pathology.
- Willard C. Rappleye.....New York
Dean, Columbia University Faculty of Medicine; Director, New York Post-Graduate Medical School; Former Director of Study, Commission on Medical Education.
- J. Stewart Rodman.....Philadelphia
Secretary, American Board of Surgery; Medical Secretary, National Board of Medical Examiners.
- Harold Rypins.....Albany
Secretary, New York State Board of Medical Examiners; Former President, Federation of State Medical Boards of United States.
- Alfred Stengel.....Philadelphia
Vice President in Charge of Medical Affairs, University of Pennsylvania.
- William P. Wherry.....Omaha
Secretary, American Board of Otolaryngology; Executive Secretary, The American Academy of Ophthalmology and Otolaryngology.
- Allen O. Whipple.....New York
Vice Chairman, American Board of Surgery; Member, Committee on Graduate Teaching, American Surgical Association.
- Ray Lyman Wilbur.....Stanford
President, Stanford University; Chairman, Council on Medical Education and Hospitals of the American Medical Association; Former President, American Medical Association; Former President, Association of American Medical Colleges.
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◆ General News and Announcements ◆

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3. Cass County Medical Society.
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5. Eaton County Medical Society.
6. Gogebic County Medical Society.
7. Ingham County Medical Society.
8. Jackson County Medical Society.
9. Lapeer County Medical Society.
10. Lenawee County Medical Society.
11. Livingston County Medical Society.
12. Luce County Medical Society.
13. Manistee County Medical Society.
14. Menominee County Medical Society.
15. Muskegon County Medical Society.
16. Newaygo County Medical Society.
17. Northern Michigan Medical Society.
18. Oceana County Medical Society.
19. Ontonagon County Medical Society.
20. Schoolcraft County Medical Society.
21. Shiawassee County Medical Society.
22. Tuscola County Medical Society.

The above County Medical Societies have paid dues in full for each and every member of the County and State Medical Society. A number of other County Societies lack but a few, sometimes only one or two, of being One Hundred Per Cent. Have YOU paid your dues?

Congratulations, Shiawassee County Medical Society!! The Shiawassee County Medical Society is the first to pay 1938 State Society dues. Every member has paid his dues, making the Shiawassee Society the first member of the "100 Per Cent Club for 1938."

Congratulations, also to Muskegon County Medical Society! Dues were received from the Muskegon Society for each of its seventy-nine members on November 17, 1937, making this progressive society another advance member of the "100 Per Cent Club for 1938."

News Week says: "Recent surveys have convinced congressmen that the people want no sweeping new reforms at this time."

The Ingham County Medical Society, on October 19, 1937, unanimously went on record as approving the creation of a county health unit in Ingham County.

Chairman of The Council, P. R. Urmston, Bay City, and *Secretary L. Fernald Foster*, Bay City, will address Lenawee County Medical Society in Adrian on February 16.

The Advisory Committee on Tuberculosis Control of the M.S.M.S. is composed of: Bruce H. Douglas, Chairman, Detroit; Robert B. Harkness, Hastings; George A. Sherman, Pontiac; George C.

Stucky, Lansing; Benjamin A. Shepard, Kalamazoo.

The November issue of THE JOURNAL, Michigan State Medical Society, contained 124 pages. The complete proceedings of the 1937 Session of the House of Delegates were published.

Complete sets of eye, ear, nose and throat instruments (chrome); also Green's eye-test cabinet and trial set are available. For further information write Mrs. H. T. Gray, 623 E. Lincoln, Birmingham, Mich.

Dr. George T. Aitken of Grand Rapids addressed the Wexford County Medical Society on the subject of "Basic Principles of Fractures," at its regular monthly meeting held in Cadillac on November 11.

The report of the "California Medical-Economic Survey, 1934-1935," has just been published by the California Medical Association. It is a formal report on factual data resulting from a statewide project operating in 26 representative counties of California during the years 1934-1935.

The Michigan Association of Industrial Physicians and Surgeons, at its annual meeting in Detroit on October 12, elected the following officers: President, E. I. Carr, M.D., Lansing; Vice President, Frank T. McCormick, M.D., Detroit; Secretary, Don F. Kuder, M.D., Jackson.

A joint "State Society Night" is being planned by the Jackson and Hillsdale County Medical Societies for January 18, 1938, in Jackson.

The Kent County Medical Society plans to sponsor a "State Society Night" in Grand Rapids on February 9, 1938.

"A Medical Train" may soon be announced which will tour the country to bring the latest advances in medical science to the profession in smaller communities. We understand this railway train, equipped with physicians, will be financed by the Red Cross, the A.C.S., and one of the big railroads.

Wm. J. Burns, executive secretary of the State Society, spoke before the Lions Club at Ann Arbor on November 8. His subject was "What Do You Want to Know About Yourself?" Mr. Burns was toastmaster at the Highland Park Physicians' Club clinic banquet on December 1 at the Statler Hotel, Detroit.

"The Bulletin" of the Muskegon County Medical Society listed the names of the members of the Muskegon Society who registered at the 72nd Annual Convention of the Michigan State Medical Society in Grand Rapids. Fifty-one physicians out of a membership of seventy-nine attended; an enviable record.

The Advisory Committee on Syphilis Control of the M.S.M.S. is composed of: Loren W. Shaffer, Chairman, Detroit; Robert S. Breakey, Lansing; R. S. Dixon, Detroit; George Hays, Flint; Roy H. Holmes, Muskegon; Wm. A. Hyland, Grand Rapids; John Lavan, Grand Rapids; C. K. Valade, Detroit; Udo J. Wile, Ann Arbor.

Membership cards of the Wayne County Medical Society include (on the reverse side) the following extract from the By-laws of the Michigan State

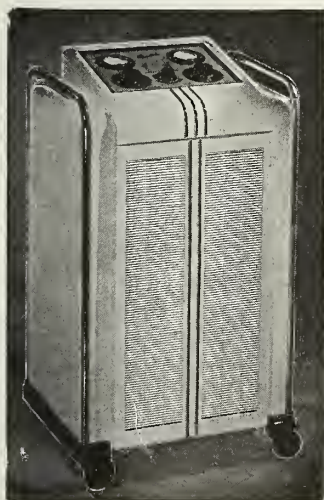
(Continued on page 1010)



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Medical Society, Chapter 1, Section 3: "...members who become reinstated shall not be entitled to medico-legal protection for any professional services rendered during their period of arrears and for which malpractice claims may arise."

* * *

Dr. James H. Dempster, Editor of THE JOURNAL, M.S.M.S., presented a paper entitled "Better Papers for State Medical Journals" at the annual dinner meeting of the editors of State Medical Journals in Chicago, at the Palmer House, November 19, 1937. The annual meeting of the editors was in conjunction with the Annual Conference of Secretaries of Constituent State Medical Associations which form the A.M.A., held November 19 and 20.

* * *

Dr. L. Fernald Foster, Secretary of the M.S.M.S., addressed the Flint Rotary Club on October 29. His subject was "What the County Medical Society Means to the Community." The professional group of the Bay City Junior College was addressed by Doctor Foster on the subject "The Health Sciences" on November 2. On November 23, Secretary Foster spoke to the Rotary Club of Monroe, Michigan, on "Principles Governing Medical Practice."

* * *

"Group Hospitalization" is the title of the new A.M.A. book of 296 pages on this subject which is of current interest to physicians, hospital administrators, and the general public. The report gives the background of group hospitalization plans, development of the movement, present status, relationship to the practice of medicine, insurance and group hospitalization, conclusions and guiding principles. The price is 75c postpaid (special rate to medical societies on orders of 100 or more copies). Address the American Medical Association, 535 North Dearborn Street, Chicago.

The M.S.M.S. JOURNAL, in its present augmented form, represents an outlay each month of well over one thousand dollars. This cost, to produce a quality journal, is covered in the main by revenue from advertisements.

In order to continue our present excellent magazine, and to add desirable refinements from time to time, may we urge the readers to go out of their way to patronize our advertisers. When ordering from an advertiser, just write or say: "I saw your advertisement in THE M.S.M.S. JOURNAL."

Auditor General George T. Gundry has announced the appointment of Dr. David Kliger, Detroit, as Medical Coördinator to administer the Crippled and Afflicted Children's Acts in Wayne County. His office will be at the Juvenile Court Building, supervised by Probate Judge, the Honorable D. J. Healy, Jr.

Mr. Gundry is negotiating to effect a similar setup in Genesee County.

* * *

The fall postgraduate conferences for physicians of Wayne County will be devoted entirely to tuberculosis, a subject in which all medical men and the entire community are interested. Meetings began on Wednesday, October 27, 1937. Among those who brought papers on the various angles of Tuberculosis were Kendall Emerson, M.D., of New York City; Esmond R. Long, M.D., of Philadelphia; J. N. Baker, M.D., Montgomery, Ala.; Horton Casparis, M.D., Nashville, Tenn.; John B. Hawes, II, M.D., Boston, Mass.; and George G. Ornstein, M.D., of New York City.

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Two resolutions of importance and interest to the medical profession were adopted at the October meeting of the American Public Health Association in New York:

(a) A resolution supporting the development of more adequate diagnostic services for the control of syphilis;

(b) A resolution authorizing a special committee to study the public health aspects of medical care, especially of chronic diseases.

* * *

Dr. J. W. Leininger of Gladwin has been given an honorary membership in The Alumni Association of the University of Ontario Medical School, London, Ont. Doctor Leininger graduated from this college in 1891 with an M.D. degree and he and Doctor McBlain of Niagara Falls are the only living members of the class.

The doctor has life memberships in the Michigan State Medical Society, the Bay County Medical Society, the F. & A. M. and the Order of the Eastern Star.

* * *

San Francisco hotels, during the 1938 A.M.A. meeting, June 13 to 18, 1938, will be crowded. It is recommended that those planning to attend the A.M.A. meeting should procure their hotel reservations at once by writing Dr. F. C. Warnshuis, Chairman of the S.F. Committee on Hotels, Suite 2004, 450 Sutter St., San Francisco, Calif. Do not write directly to any hotel, as all reservations will be cleared through the Hotel Committee.

Those planning to visit San Diego, Los Angeles, Santa Barbara, Del Monte, Yosemite and other California cities are urged to write in advance for hotel reservations.

Dr. Wm. G. Gamble, pathologist at Mercy Hospital, Bay City, motored to Menominee, Michigan, on Monday, October 25, for a speaking trip in the interest of the Michigan State Medical Society. At noon Doctor Gamble addressed a joint meeting of the Menominee (Mich.) and Marinette (Wisc.) Rotary Club on the subject of "Heredity." In the evening he addressed a joint meeting of the Menominee and Marinette Medical Societies with an illustrated lecture on "Syphilis."

Doctor Gamble was very much impressed with the keen interest and cooperation of the physicians in Menominee and their colleagues across the river in Wisconsin.

* * *

Medical readers of *Nation's Business* enjoyed two articles re phases of socialized medicine: The May issue was entitled "Uncle Sam, M.D.," and commented that "compulsory health insurance has been dressed alluringly but there is another side which those who are sick, or may become sick, will do well to study."

The November, 1937, issue contained a story entitled "The Taxpayer Pays the Doctor," with the following comment: "Socialized medicine makes its bow in this country through a little publicized plan which allocated \$20,000 of tax money to guard the health of federal employees." The latter story was relative to the HOLC plan, discussed in the October, 1937, issue of THE JOURNAL of the M.S.M.S.

* * *

You'll have something to remember all your life if you go to San Francisco next June for the A.M.A. Convention via the "Golfers' Special."

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Non-golfers as well as golfers, and their ladies, are invited. For further information write Dr. Walt P. Conaway, president of the American Medical Golfing Association, 1723 Pacific Avenue, Atlantic City, N. J.

* * *

Transparent Woman Exhibited



Left to right: Dr. Henry Cook, Flint, president of the Michigan State Medical Society; Dr. Henry A. Luce, Detroit, president-elect of the Michigan State Medical Society; Dr. James D. Bruce, Ann Arbor, vice president of the University of Michigan; Dr. John D. Van Schoick, Hanover, president-elect of the Jackson County Medical Society.

The *Transparent Woman* exhibit sponsored by S. H. Camp and Company, Jackson, Michigan, was previewed by 300 members of the medical profession and their guests last month in Jackson, Michigan.

Dr. John D. Van Schoick, president-elect of the Jackson County Medical Society, collaborated in a broadcast over WIBM with Dr. Henry Cook, Flint, president of the Michigan State Medical Society, Dr. James D. Bruce, Ann Arbor, vice president of the University of Michigan, and Dr. Henry A. Luce, Detroit, president-elect of the State Medical Society, in presenting this public health educational exhibit to the public.

For the seven-day period that the exhibit was on public exhibition in Jackson, approximately twenty thousand persons saw it.

Since this exhibit was introduced a year ago, it is estimated that it has been seen by more than two million persons and approximately thirty-five thousand physicians in the seven cities that it has visited.

* * *

Crippled and Afflicted Child commitments for October, 1937:

Crippled Child: Total of 305. Of the total number, 139 went to University Hospital, and 160 went to miscellaneous hospitals. From Wayne County (included in above totals): Total cases, 82. Of the 82 cases in Wayne County, 10 went to University Hospital and 72 went to miscellaneous hospitals.

Afflicted Child: Total of 1,183 cases of which 186 went to University Hospital, and 997 went to miscellaneous hospitals. From Wayne County (included

in above totals): Total cases, 393. Of the 393 cases in Wayne County, 33 went to University Hospital and 360 went to miscellaneous hospitals.

This is a reduction in commitments of afflicted children of 525 from the month of September.

* * *

Just to remind you, a list of some of your friends who entered technical exhibits at the Grand Rapids Convention of the Michigan State Medical Society, will be published each month in THE JOURNAL.

For your convenience, here are ten of the firms which displayed their products at the Michigan State Medical Society Annual Meeting, in September, 1937:

A. S. Aloe Company, St. Louis, Mo.
American Seating Company, Grand Rapids, Mich.
The Arlington Chemical Company, Yonkers, N. Y.
The Bard-Parker Company, Inc., Danbury, Conn.
The Borden Company, New York, N. Y.
Bruce Publishing Company, St. Paul, Minn.
Burroughs, Wellcome & Co., U.S.A., Inc., New York, N. Y.
S. H. Camp & Company, Jackson, Mich.
Coca-Cola Company, Atlanta, Ga.
R. B. Davis Company, Hoboken, N. J.

* * *

The Radio Committee of the Michigan State Medical Society announces the following radio stations which are cooperating in presenting a series of twenty-four weekly broadcasts, which began the week of November 1 and will close in April:

Station	City	Day of Week	Time
WELL	Battle Creek	Wednesday	6:30 P.M.
WBCM	Bay City	Tuesday	12:30 P.M.
CKLW	Detroit	Tuesday	7:15 P.M.
WFDF	Flint	Wednesday	7:15 P.M.
WOOD	Grand Rapids	Tuesday	1:00 P.M.
WHDF	Calumet		
WIBM	Jackson	Wednesday	9:00 P.M.
WKZD	Kalamazoo	Wednesday	1:45 P.M.
WJIM	Lansing	Monday	11:00 A.M.
WKBZ	Muskegon	Thursday	11:00 A.M.

This program is being conducted through the co-operation of the Joint Committee on Health Education. The dates and lists of lectures follow:

Week of	Title
Nov. 1	Ideals in Medicine
Nov. 8	First Aid to the Injured
Nov. 15	Cancer
Nov. 22	Colds and Their Complications
Nov. 29	Dental Talk
Dec. 6	Hearing
Dec. 13	Tuberculosis and the Child
Dec. 20	Pneumonia
Dec. 27	Why Children Misbehave
Jan. 3	Dental Talk
Jan. 10	Appendicitis
Jan. 17	Medical Legislation
Jan. 24	Syphilis
Jan. 31	Handicapping the Heart
Feb. 7	Dental Talk
Feb. 14	Common Eye Troubles
Feb. 21	Maternal Health
Feb. 28	Gonorrhea
Mar. 7	The Use of Anesthetics
Mar. 14	Dental Talk
Mar. 21	Surgery
Mar. 28	Head Injuries
Apr. 4	The Doctor Looks at Cleanliness and Health
Apr. 11	The Surgical Management of Tuberculosis.

* * *

American Board of Obstetrics and Gynecology

The next examination (written and review of case histories) for Group B candidates will be held in various cities of the United States and Canada, on Saturday, February 5, 1938. Application for admission to this examination must be on an official application form and filed in the office of the Secretary at least sixty days prior to this date.

The general oral, clinical and pathological examinations for all candidates (Groups A and B) will be conducted by the entire Board, meeting in San Francisco, California, on June 13 and 14, 1938, im-

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GYNECOLOGY—Diagnostic Courses; Clinical Courses; Special Courses.

FRACTURES & TRAUMATIC SURGERY—Informal Practical Course; Ten Day Intensive Course starting February 14, 1938.

OTOLARYNGOLOGY—Two Weeks Intensive Course starting April 4, 1938.

OPHTHALMOLOGY—Two Weeks Intensive Course starting April 18, 1938; Personal Course in Refraction.

UROLOGY—General Course Two Months; Intensive Course Two Weeks; Special Courses.

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mediately prior to the meeting of the American Medical Association.

Application for admission to the June, 1938, Group A examinations must be on file in the Secretary's office before April 1, 1938.

For further information and application blanks, address Dr. Paul Titus, Secretary, 1015 Highland Building, Pittsburgh (6), Pa.

* * *

The Evangelical Deaconess Hospital of Detroit dedicated an addition to the hospital which brings the number of beds up to two hundred. The program of the day, namely, November 10, consisted of clinical conferences and addresses by the following speakers:

Clinical-Pathological Conference—Plinn F. Morse, M.D., Pathologist, Evangelical Deaconess, Harper, Highland Park and Grosse Pointe Cottage Hospitals, Detroit, Michigan.

Introductory—Raymond B. Allen, M.D., Dean, Wayne University College of Medicine, Detroit, Michigan.

Diabetes, and Remarks Upon the Attitude of Hospitals Toward Diabetic Patients and Their Doctors—Elliott P. Joslin, M.D., Clinical Professor of Medicine, Harvard Medical School, Boston, Massachusetts.

Elective Version: Its Uses and Abuses—Irving W. Potter, M.D., Attending Obstetrician, Deaconess, Buffalo City and Millard Fillmore Hospitals, Buffalo, New York.

Complimentary Luncheon at the Hospital.

Acute Infections of the Mouth and Throat—Albert C. Furstenberg, M.D., Dean and Professor of Otolaryngology, University of Michigan Medical School, Ann Arbor, Michigan.

Some Considerations on the Treatment of Wounds—Willis D. Gatch, M.D., Dean and Professor of Surgery, University of Indiana Medical School, Indianapolis, Indiana.

* * *

"If a child is admitted to a hospital under a Probate Court order as an afflicted child, and is found to be tuberculous, what is to be done?"

According to the State Department of Health, the Michigan Crippled Children Commission, and the Auditor General of the state, tuberculous cases take precedence over other conditions such as may come under the Afflicted Child Act. Answering the above question asked by a Michigan physician, the child would be immediately transferred to a tuberculosis sanitarium, when found to be tuberculous. Should there be no room in a state sanitarium at the moment, the child will be sent to one of the hospitals approved by the State Health Department for the care of tuberculous patients.

The new tuberculosis law allows \$1.50 per day per case, paid by the State of Michigan to the hospital, for this hospitalization; the balance is paid by the county.

If there is no room in a state sanitarium, and the child remains in an approved hospital, the tuberculosis rates continue—except in childhood type tuberculosis, which cost is entirely paid by the State of Michigan at the established flat rate for the first fifteen days and at \$2.00 per day for each day thereafter.

The 1937 laws affecting tuberculosis are Acts No. 93, No. 211, and No. 213 of the Public Acts of 1937, which may be procured by writing the Secretary of State, Lansing, Michigan; or by sending a card to the Executive Office, M.S.M.S., 2020 Olds Tower, Lansing, Michigan.

Medical societies are exempt under Federal Internal Revenue laws, according to a ruling of the Commissioner of Internal Revenue, Treasury Department, Washington, D. C. This decision was contained in a communication to the Wayne County Medical Society dated September 4, 1937 (published in *THE JOURNAL*, M.S.M.S., October, 1937, p. 790).

The following ruling covers taxes imposed by the Social Security Act, and further exempts medical societies from the taxing provisions of the law:

The Wayne County Medical Society
4421 Woodward Avenue
Detroit, Michigan.

Sirs:

Reference is made to office letter dated September 4, 1937 (IT:RR:CQ), relative to the status of the County Medical Society for Federal income tax purposes.

You were advised that the Wayne County Medical Society is entitled to exemption from income tax under the provisions of Section 101 (6) of the Revenue Act of 1936, and that its status for the purposes of the taxes imposed by the Social Security Act, would be made the subject of a separate communication.

The provisions of Section 101 (6) of the Revenue Act of 1936 are substantially similar to the provisions of Sections 811(b) (8) and 907(c) (7) of the Social Security Act.

Accordingly, the taxes imposed by Titles VIII and IX of the Social Security Act are not applicable with respect to remuneration for services performed in the employ of the Wayne County Medical Society, unless it changes the character of its organization or operations or the purpose for which it was originally created.

Respectfully,

VICTOR H. SELF, Acting Chief,
Social Security Tax Unit.

October 6, 1937

* * *

The Detroit Otolaryngological Society, on November 17, 1937, joined as a group the Detroit Society for the Hard of Hearing, Chapter XV of the American Society for the Hard of Hearing. It followed the example of the Cincinnati Otolaryngological Society, which acted in a similar manner.

* * *

The attention of the profession is called to the report of the Syphilis Control Committee with approved outlines of treatment for syphilis which appears in this number of *THE JOURNAL* of the Michigan State Medical Society.

* * *

A Panel Discussion on "How Can We Improve Medical Care?" was arranged by the Adult Education Committee at Western State Teachers College, Kalamazoo, on November 30.

Discussion leaders included officers and members of the Michigan State Medical Society: President Henry Cook of Flint; Secretary L. Fernald Foster of Bay City; Dr. C. C. Slemmons, State Com. of Health; and Drs. Hugo Aach, C. L. Bennett and K. Bennett of Kalamazoo. Others who attended were Chairman of the Council P. R. Urmston of Bay City, and Dr. F. T. Andrews, Council of the 4th District, Kalamazoo.

Dr. Slemmons opened and closed the discussion, which was spirited and informative throughout.

Many members of the Kalamazoo-VanBuren Academy of Medicine were present.

* * *

The Medical Finance Service is a Detroit institution in connection with the Wayne County Medical Society, with offices in the Society's building at the corner of Woodward and Canfield. The Medical Finance Service loans money to pay the cost of illness, including services of physician, dentist, hospital, nurse and pharmacist. All applications for this service must be referred by the attending physician. The patient is enabled to pay the cost of the particular care he received and to liquidate the sum paid over a period of months at the rate of interest of six per cent. The doctor, hospital, dentist,

(Continued on page 1016)

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* * *

The American Board of Internal Medicine

The American Board of Internal Medicine will hold its next written examination on Monday, February 14, 1938, in various centers of the United States and Canada.

The examination will consist of two sessions of three hours each, with the morning session held at 9:00 o'clock A. M. and the afternoon session held at 2:00 o'clock P. M.

The candidates who are successful in this written examination will be eligible to take the practical examination which will be held in San Francisco the Friday and Saturday prior to the opening of the Annual Session of the American Medical Association in June, 1938.

The final date for filing applications for this written examination is January 15, 1938, and all applications should be in the office of the chairman before that date.

For further particulars and application blanks please address Dr. Walter L. Bierring, M.D., Chairman, American Board of Internal Medicine, Suite 1210, 406 Sixth Avenue, Des Moines, Iowa.

AN OPEN LETTER TO PHYSICIANS:

The 1937 legislature amended the act regulating the practice of barbering to provide that any person, to be registered as a student in a barbers' school, must have a certificate from the State Department of Health that he or she is free from contagious and infectious disease.

Enforcement of this law by having these examinations performed by Michigan Department of Health physicians is obviously impossible. *Therefore I am appointing every legal practitioner of medicine in the state an examiner for the purposes of Act 30, Public Acts of 1937.*

The barber schools of the state have been notified that they may accept the certificate of any legal practitioner of medicine. The State Board of Examiners for Barbers will consider the possibility of furnishing the certificate blanks to the schools. The applicant will present the certificate to the physician.

Very truly yours,

C. C. SLEMONS, M.D.,

Commissioner.

November 17, 1937.

A "refresher course" was held at Sturgis, Michigan, on December 13 under the sponsorship of the Michigan Crippled Children Commission, in co-operation with the Michigan State Medical Society and the Postgraduate Department of the U. of M. Dr. Carl E. Badgley of Ann Arbor presented "Some Interesting Fractures." Dr. John L. Law, Ann Arbor, discussed "Mental Problems in Children."

Many physicians who attended the refresher remained over night in Sturgis to attend the orthopedic clinic the following morning.

* * *

PULLING TOGETHER FOR HEALTH

By LOUISE STRACHAN, Director, Child Health Education, National Tuberculosis Association

The lusty town crier on 1937's Christmas Seal brings a two-fold message. One is full of cheer: that ancient enemy of the

Christmas Seals! human race is being slowly but steadily routed; the other is an appeal for "a long pull, a strong pull, and a pull all together" to complete the overthrow of this plague of mankind.



Buy and Use Them

It is so easy to relax vigilance when the tide of battle has turned against the enemy. Yet a careful reconnaissance reveals that the sector where youth stands is still hard pressed; tuberculosis is still killing more young people between the ages of fifteen and twenty-five than any other disease.

Heroic tales there are aplenty about the struggles of youth with its arch foe. Tuberculin testing and x-raying have now taken their place as accepted routine procedures in the health examination of college students in our leading colleges and universities but there are still far too many of our young people without this protection. The case of a young woman, whose condition went unrecognized until tuberculosis had reached an advanced stage, has so aroused the members of her college sorority that they have undertaken an educational campaign among their own chapters to instruct them in the newer knowledge of the prevention and control of tuberculosis. After fourteen years of struggle against the disease this brave fighter writes: "Life ahead does not look encouraging but the years in retrospect are darker still. I have never, however, abandoned the thought that I may still be well enough to be useful in some small way. . . . Most of the history in my case can be blotted from the pages of those who now take the cure because of the ever-increasing vigilance of the medical profession and the support of an informed public. These measures are economy, not only in money, but economy in lives that have too many times heretofore been needlessly wasted. The medical profession must continue to rescue unceasingly the young people threatened with destruction and an increasingly educated public must continue to coöperate with the medical profession, for the battle is only well begun."

Such a waste of young life is costly and unnecessary. That is why the call comes each year to buy Christmas Seals. One of the activities promoted by the National Tuberculosis Association and its affiliated groups is the development of tuberculosis work in colleges. This activity is carried on in coöperation with the American Student Health

Association and its branches all over the country. The National Tuberculosis Association helped to organize and carry through the First National Conference on College Hygiene in 1931, which, among other things, made specific recommendations for the prevention and control of tuberculosis in colleges. The Second National Conference, held in December, 1936, carried forward the work of the First Conference and, in the light of studies made in the interim between the two Conferences, was able to define more clearly and sharply the varied college problems identified with tuberculosis.

In similar fashion, the work is going forward in high schools. Tuberculosis associations, health departments, sanatoria, and parent-teacher organizations are working in many states with school health committees to develop adequate programs for high school students. They include tuberculin testing, x-raying of positive reactors and classroom instruction in tuberculosis as a communicable disease.

No one group can ever conquer a foe like tuberculosis. The knowledge that this disease is preventable and curable, that modern weapons now available can eradicate the disease if only they are used, should arouse every citizen and every organized group concerned with the welfare of its community to pull together and achieve the goal that is indeed in sight, but still afar off.

MID-WINTER MEETING
OF THE COUNCIL
Detroit, January 12-13, 1938

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

A TEXTBOOK OF SURGICAL NURSING. By Henry S. Brookes, Jr., M.D., Instructor in Clinical Surgery, Washington University School of Medicine; Surgeon to the Out-Patients, Washington University Dispensary; Assistant Surgeon to Barnes Hospital. With 233 Illustrations. St. Louis: The C. V. Mosby Co., 1937.

OBSTETRIC AND GYNECOLOGIC NURSING. By Frederick H. Falls, M.S., M.D., F.A.C.S., Professor of Obstetrics and Gynecology, University of Illinois, College of Medicine; Attending Gynecologist of the Illinois Research and Educational Hospital; Attending Gynecologist, Cook County Hospital; Attending Gynecologist and Obstetrician at Grant Hospital; Consulting Gynecologist at St. Luke's Hospital; Consulting Obstetrician at West Suburban, Swedish Covenant, Augustana, Norwegian, Lutheran Deaconess, and St. Vincent's Hospitals; and Jane R. McLaughlin, B.A., R.N., Supervisor of the Department of Obstetrics and Gynecology, Research and Educational Hospital, University of Illinois, College of Medicine; Instructor in the Department of Obstetrics, University of Illinois, College of Medicine; Formerly Instructor in Obstetrics and Gynecology, Cook County Hospital School of Nursing; Supervisor of Obstetrics and Gynecology, University of Iowa; Supervisor of Obstetrics and Instructor in the School of Nursing, University of Maryland. Illustrations by Charlotte S. Holt. St. Louis: The C. V. Mosby Company, 1937.

PSYCHIATRIC NURSING. By William S. Sadler, M.D., Chief Psychiatrist and Director, The Chicago Institute of Research and Diagnosis; Consulting Psychiatrist to Columbus Hospital in collaboration with Lena K.

How to choose your food for maximum health qualities

The major portion of the book is concerned with setting down, in simple, unequivocal statements, the most up-to-date and generally recognized truths of what is now known about diet. It shows how to select foods so as to avoid deficiencies in the diet and to obtain from them the maximum qualities for health and for growth that various food substances are able to provide.

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Your Diet and Your Health

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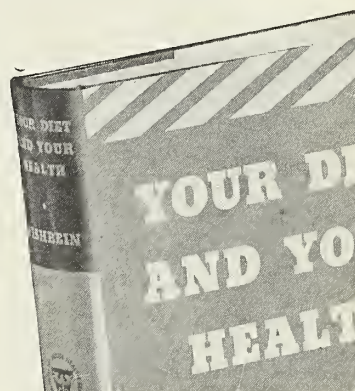
The book gives full discussions of the proportions of protein, carbohydrate, fat recommended; the value and use of minerals; the real importance of the much-touted vitamins; the merits of the various weight-reduction diets, and many other topics. There are also special sections on suggested diets; food "sensitivities"; and in general much good common sense on a subject which has been peculiarly obscured by fads.

A number of tables giving food values, calorie content of various foods, vitamin sources, minimum diets, food values of alcoholic beverages, etc., have been included.

Dr. Fishbein says:

"As a result of our new knowledge, children are growing bigger and taller and weigh more than did their ancestors in previous generations. We know that it is possible to make them live a little longer. That is certainly more than enough to warrant widespread dissemination of the truth about diet."

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Chapter Headings

Your Calories	Diets for Children
The Cost of Food	Special Diets
Hunger and Appetite	Diet and Weight
Digestion	Food Sensitivities
Debunking Diets	Diets in Disease
Peculiar Schools of Dieting	Conditions
Protein	Milk and Milk Products
Carbohydrates	Bread
Fats	Wheat
Water	Fish
Mineral Salts	Vegetables
The Vitamins	Fruits
Facts About Food	Miscellaneous Foods
	Conclusion

Sadler, M.D., Associate Director, The Chicago Institute of Research and Diagnosis; Medical Director, The North Side Rest Home; Attending Physician, Columbus Hospital and the Women and Children's Hospital; and Anna B. Kellogg, R.N., Member American Nurses Association; Chief of Nurses, The Psychiatric Clinic of the Chicago Institute of Research and Diagnosis; Instructor in Psychiatric Nursing, The North Side Rest Home. St. Louis: The C. V. Mosby Company, 1937.

SYPHILIS, THE NEXT GREAT PLAGUE TO GO. By Morris Fishbein, M.D., Editor, *Journal of the American Medical Association*, and of *Hygieia*, the Health Magazine. Philadelphia: David McKay Company, 1937.

OBSTETRICS FOR NURSES. By Joseph B. DeLee, A.M., M.D., Professor of Obstetrics and Gynecology, Emeritus, University of Chicago; Consultant in Obstetrics, Chicago Lying-in Hospital and Dispensary; Consultant in Obstetrics, Chicago Maternity Center; and Mabel C. Carmon, R.N., Chief Supervisor and Instructor in the Birthrooms, Chicago Lying-in Hospital and Dispensary. Eleventh Edition. Revised and Reset. Philadelphia and London: W. B. Saunders Company, 1937.

EMOTIONAL ADJUSTMENT IN MARRIAGE. By Le Mon Clark, M.S., M.D., Assistant in Obstetrics and Gynecology, University of Illinois College of Medicine. St. Louis: The C. V. Mosby Company, 1937.

PHYSICAL THERAPY IN ARTHRITIS. By Frank Hammond Krusen, M.D., Associate Professor of Physical Medicine, The Mayo Foundation, University of Minnesota; Head of the Section On Physical Therapy, The Mayo Clinic. Foreword by Melvin S. Henderson, M.D. With 21 Illustrations. New York: Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, 1937.

A DIABETIC MANUAL FOR THE MUTUAL USE OF DOCTOR AND PATIENT. By Elliott P. Joslin, M.D., Clinical Professor of Medicine, Harvard Medical School; Medical Director, George F. Baker Clinic at the New England Deaconess Hospital; Consulting Physician, Boston City Hospital, Boston, Massachusetts. Sixth edition, thoroughly revised. Illustrated. Philadelphia: Lea & Febiger, 1937.

THE COLLAPSE THERAPY OF PULMONARY TUBERCULOSIS. By John Alexander, B.S., M.A., M.D., G.A.C.S., Professor of Surgery, University of Michigan; Surgeon-in-Charge, Division of Thoracic Surgery, Department of Surgery, University of Michigan Hospital. With contributions of Chapters III and IV on Physiological Principles and Pathology of Pulmonary Collapse, by Max Pinner, M.D., F.A.C.P., Herman M. Biggs Memorial Hospital, Ithaca, New York; Principal Diagnostic Pathologist, District Tuberculosis Hospitals, New York State Department of Health. Chapters XI and XII on Pneumothorax by John Blair Barnwell, B.A., M.D., Associate Professor of Internal Medicine, University of Michigan, and Physician-in-Charge, The Tuberculosis Unit, Department of Internal Medicine, University of Michigan Hospital. Chapter XV on Oleothorax by Kirby Smith Howlett, Jr., M.S., M.D., Resident, Laurel Heights State Tuberculosis Sanatorium, Shelton, Connecticut. Charles C. Thomas, Springfield, Illinois, and Baltimore, Maryland. 1937. Price, \$15.00.

While there is nothing geographically regional in the scope and purpose of this work, it should, however, have a special appeal to Michigan, appearing on the thirtieth anniversary of the organization of the Michigan Tuberculosis Association. It is by a surgeon who has done a great work in the newer treatment of tuberculosis. There are also chapters by associate writers who have been active in teaching and other hospitals in this state. Collapse therapy is discussed in all its phases from the crushing of the phrenic nerve to thoracoplasty. Dr. Alexander's book is the most complete work on the subject in the English language. It should be read and studied by every physician, not only by him who assays to treat pulmonary tuberculosis, which has largely become an institutional function, but by those equipped to treat such patients in the office and in the home. The technic of method is given in detail. The work is fully illustrated by radio-

graphs, zinc etchings and drawings of excellent quality. An exhaustive bibliography of the literature of the subject is appended to the book. The index is likewise full and complete, making the work serviceable to the tuberculosis surgeon and the internist.

Certain Significant Aspects of Childhood Tuberculosis: Chairman's Address

Ralph M. Tyson, Philadelphia (*Journal A. M. A.*, Sept. 4, 1937), stresses the need for a more general use of the tuberculin test in order that the first infection cases can be found and the patient guarded against reinfection. A survey of the pediatric cases admitted to a children's ward during the last five years shows an incidence of positive Mantoux tests of 20 per cent. At the present time it is believed that most tuberculous infections are air borne and gain entrance into the human body by way of the pulmonary structures. Pasteurization and boiling of milk have practically eliminated the gastro-intestinal tract as a portal of entry. After the tubercle bacilli are inhaled, they usually lodge in that part of the respiratory tract which is free from cilia; the terminal bronchioles and alveoli. These organisms act very similarly to particles of dust and fail to produce any obvious clinical signs or symptoms. However, according to Fried, the respiratory epithelium of these areas so involved responds within a very few minutes. Some of the tubercle bacilli remain entrapped exclusively within the intra alveolar lesions. Others are carried by phagocytic cells through the walls of the air sacs, along lymphatic channels, and usually lodge in the regionally located lymph nodes. Undoubtedly in some cases the organisms are immured for life in these various areas of the lung tissue. The size of the dose of the infecting organisms and the multiplicity of its repetition and the amount of the local tissue resistance are all determining factors in the spread of the disease. The early pathologic condition is commonly spoken of as a primary complex and consists of the area of first penetration of the pulmonary structures, the lymphangitis along the pathways, and the lymphadenitis. One of the most animated controversies in tuberculosis work has been over the origin of reinfection, whether endogenous or exogenous in nature. Evidence is accumulating which seems to show that reinfections are the result of an exacerbation of a primary infection caused by the rupture of a lymph node or parenchymal tubercle into a new lymph node, a bronchus, the blood or lymph streams. What happens to the young child infected for the first time by the tubercle bacillus depends on the degree of natural immunity of the child's own tissues first involved, the degree of acquired immunity which the localization sets up and the amount of allergic tissue hypersusceptibility resulting from this first localization. The question of whether the primary infection is an asset or a liability is contested very earnestly by several groups of workers. It is the hope of all who deal with children that a diagnosis of tuberculosis might be made during the first chapter of the life history of the tubercle bacillus. A definite diagnostic plan including a history of exposure, weight curve, general condition, fever, later signs, tuberculin tests, serial x-ray studies, gastric lavage, sedimentation index and skin rashes are aids that lead one to proper conclusions. The most efficacious procedure in preventing tuberculosis in infants and children is to keep them from coming in contact with open cases of the disease. The so-called healed adult case may be a source of contamination. It seems particularly valuable to pre-

vent children from being born of tuberculous parents. Neither man nor woman has a right to marry when actively ill with the disease, because under such circumstances children born of such parents usually have to live with them and constant exposure results. Under such circumstances the securing of a healthy foster mother to care for the child in her own home will help to prevent contamination of the infant. The tuberculous mother should not nurse her baby, and all close contact with the child should be avoided. A study of mortality records shows the increasing death rate from tuberculosis in children during adolescence and shortly thereafter. During this time a great many children are anemic and underfed, and going through changes in their endocrine glands and constantly being stimulated to a great variety of activities, thereby interfering with adequate rest. There would appear to be some relationship between the development of the sexual functions and resistance to tuberculosis. Animal experimentation seems to corroborate this idea. The greatest danger of tuberculosis in the weak, anemic or underfed child comes with the approach of and during adolescence. Preventive work in this group is particularly deficient. Long hours in badly ventilated class rooms and college lecture halls, and in stores and work rooms, together with a lack of recreation, irregular meals of poor quality and insufficient quantity and insanitary living in general are mainly responsible for the spread of tuberculosis in the adolescent. The influence of maintaining optional nutrition for every child, hoping thereby to increase resistance not only to tuberculosis but to all diseases, is a form of prevention that is frequently overlooked. It is difficult to restrict activities of the growing child, but undoubtedly sufficient rest for each individual child will help materially in the prevention of tuberculosis.

Among Our Contributors

Dr. Wm. L. Benedict, of Rochester, Minnesota, was graduated from the University of Michigan in 1912. He has been head of the Section on Ophthalmology, Mayo Clinic, since 1917. He is Professor of Ophthalmology, The Mayo Foundation Graduate School, University of Minnesota, and he was president of the Mayo Clinic staff from 1933-1935.

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Alpena-Alcona- Presque Isle.....	DR. C. A. CARPENTER Onaway	HAROLD KESSLER Alpena	Last Thursday 6:00 p. m.	Last Thursday December
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Chippewa- Mackinac	F. J. MOLONEY Sault Ste. Marie	GEO. A. CONRAD Sault Ste. Marie	1st Friday	1st Friday December
Clinton	F. E. LUTON St. Johns	T. Y. HO St. Johns	Last Tuesday (Oct. to June, incl.)	Last Tuesday October
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Dickinson-Iron	D. R. SMITH Iron Mountain	W. H. HURON Iron Mountain	1st Thursday 6:30 p. m.	1st Thursday December
Eaton	H. A. MOYER Charlotte	THOMAS WILENSKY Eaton Rapids	Last Thursday	No set date
Genesee	ALVIN N. THOMPSON Flint	C. W. COLWELL Flint	2nd and 4th Tuesday (except July and August)	2nd Tuesday November
Gogebic	C. C. URQUHART Ironwood	F. L. S. REYNOLDS Ironwood	3rd Tuesday	3rd Tuesday December
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Hillsdale	W. E. ALLEGER Pittsford	E. G. MCGAVRAN Hillsdale	Last Thursday	Last Thursday December
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Huron-Sanilac	F. O. KIRKER Sandusky	E. W. BLANCHARD Deckerville	2nd Thursday	2nd Thursday December
Ingham	MILTON SHAW Lansing	R. J. HIMMELBERGER Lansing	3rd Tuesday 6:30 p. m.	3rd Tuesday December
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Lenawee	A. W. CHASE Adrian	ESLI T. MORDEN Adrian	3rd Tuesday	3rd Tuesday December
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Macomb	JOSEPH N. SCHER Mt. Clemens	R. F. SALOT Mt. Clemens	1st Monday 12:00 noon	1st Monday December
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Marquette-Alger	E. R. ELZINGA Marquette	D. P. HORNBOKEN Marquette	No set date	December
Mason	W. S. MARTIN Ludington	CHAS. A. PAUKSTIS Ludington	No set time	No set time
Mecosta-Osceola	THOMAS P. TREYNOR Big Rapids	GLENN GRIEVE Big Rapids	2nd Tuesday	2nd Tuesday December

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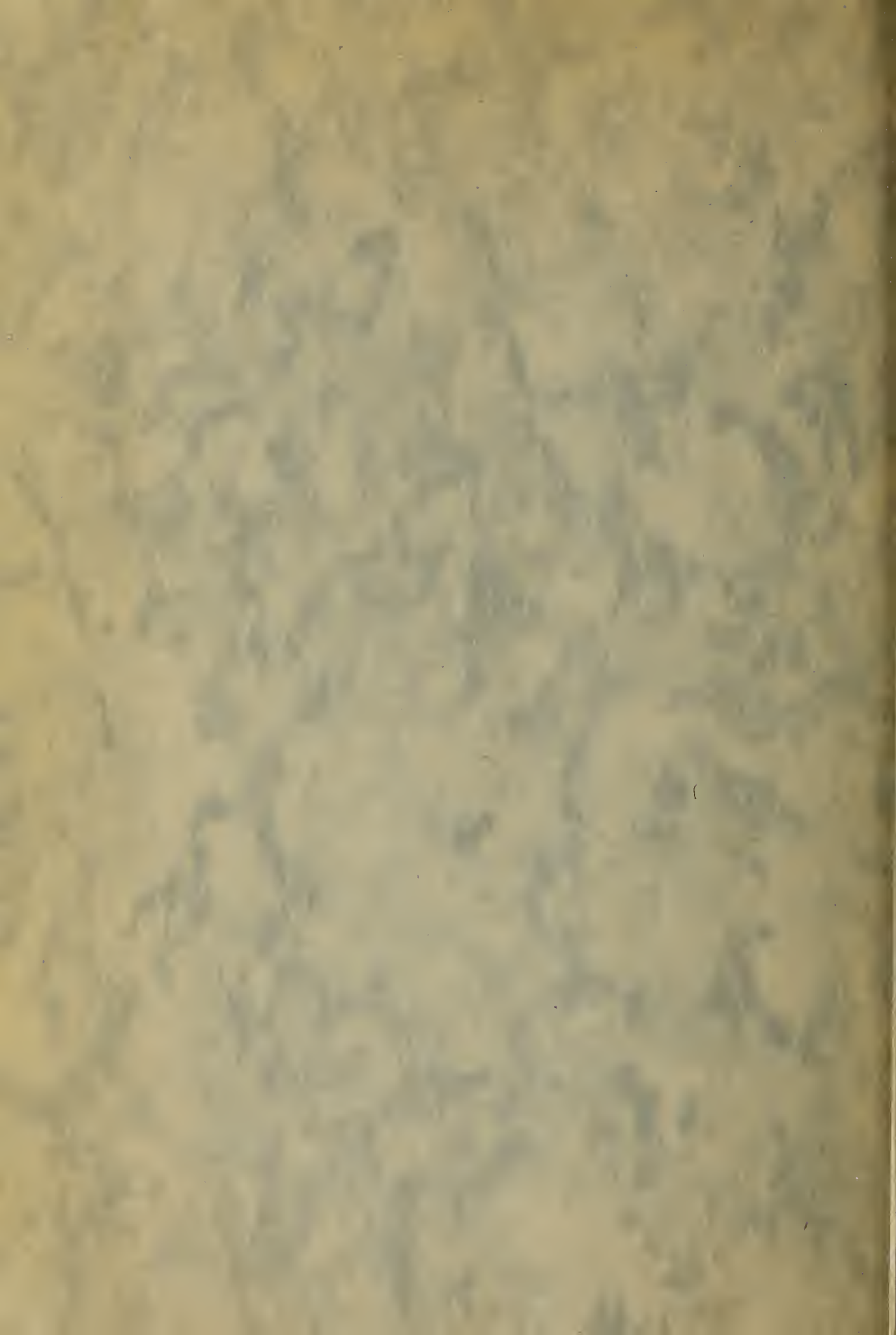
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